User Guide

Data Bank Shuttle Automated Function Executive (DBSAFE)

Checkout and Launch Control Systems (CLCS)

84K07501

Approval:

Jerry D. Murr, Lead, DBSAFE CSCI	Date	Kirk Lougheed, Chief, System Engineering and	Date
Larry Wilhelm, Chief, Software Design Division	Date		Date
	 Date		Date

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USER GUIDE

DATA BANK SHUTTLE AUTOMATED FUNCTION EXECUTIVE (DBSAFE) CHECKOUT AND LAUNCH CONTROL SYSTEMS (CLCS)

1. INTRODUCTION

2. WORK AUTHORIZATION DOCUMENT/TRACKER - WAD/TRACKER

The WAD/Tracker component of DBSAFE is the primary software interface for maintaining change authorization and approval cycle components in the DBSAFE database.

Figure 2-1 depicts the relationships in the WAD/Tracker component of DBSAFE. One or more Work Authorization Documents (WADs) may be worked on a Tracker. The Tracker is the Data Bank engineer's descriptive name for the changes being incorporated in the FD database. One or more Trackers may be included in a Test Preparation Sheet (TPS). The changes authorized by a TPS may be implemented in the FD database using one or more TPS Run IDs. TPS Run IDs are like batch input files in that they bundle a set of FD database updates to be incorporated at the same time (and assigned the same DB revision number).

DBSAFE requires creation of a unique WAD for each work group impacted by a WAD. This may be accomplished by appending a descriptive suffix to the real WAD Number so that each work group can easily identify their change authorization (refer to Section 2.6). DBSAFE maintains separate WAD/Tracker/TPS/Run ID structures; only members of a particular work group can manipulate the data owned by that work group.

When assigning WADs to a Tracker and Trackers to a TPS, keep in mind that FD change history is maintained at the Tracker level. It is also the level at which the effectivity of a change is defined. This affects processing within TCID and Baseline components of DBSAFE, and, although Data Bank engineers lock and review pending updates at the Run ID level, PAE and NASA reviews occur at the TPS level. Therefore, all the updates for a TPS must be completed and the Run IDs locked before this final review and approval cycle begins.

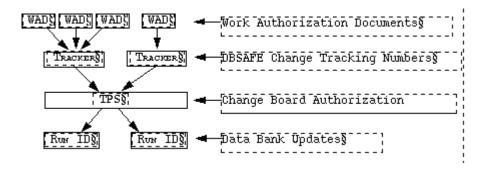


Figure 2-1 Change Authorization Structure

2.1 MAINTAIN WAD TYPE DATA – WAD TYPE

The Maintain WAD Type Data form is used to maintain the LEGAL_WAD table (refer to Figure 2-2). This table holds the WAD prefixes that can be used when adding new WADs.



Figure 2-2 Maintain WAD Type Data

2.1.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality.

2.1.1.1 Legal Value Checks and Restrictions

Each WAD Type created in DBSAFE must be unique.

2.1.1.2 **Queries**

The form can be queried on WAD Type and/or Status.

2.1.1.3 Inserts

All fields are mandatory for creating a new record.

2.1.1.4 Updates

Only the Status field can be modified. The WAD Type field cannot be modified. A WAD Type may be renamed using the Rename WAD Type form (refer to Section 2.10).

2.1.1.5 **Deletes**

A WAD Type can be physically deleted using this form if the WAD Type does not exist in other tables in the database. If the WAD Type does exist in other tables, a message displays and the Status field is set to Inactive. The operator then presses <Commit> to logically remove the WAD Type from the legal table (this means it cannot be used when adding new WADs to the database).

TABLE 2-1 WAD Type Elements

Label	Action	Default	Remarks
Wad Type	Q, A, D, L	None	LOV for Query only.
Status	Q, M	Active	Poplist: Active, Inactive
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

2.2 MAINTAIN WAD DATA – WAD (DB)

Data Bank engineers maintain WAD data using this form (refer to Figure 2-3). Additionally, the buttons at the bottom access other forms supporting maintenance of WAD Comments (refer to Section 2.9), ODIS Information (refer to Section 2.8), and Tracker Data (refer to Section 2.7). Trackers can only be created in DBSAFE by using the button on this form that navigates to the Tracker Data form.

2.2.1 FUNCTIONAL DESCRIPTION

The Maintain WAD Data form exhibits standard Oracle® Run*Form fiunctionality. New forms display when <Comments>, <ODIS Info>, or <Trackers> are pressed. Refer to section 2.2.1.6 for special considerations associated with these three buttons.

2.2.1.1 Legal Value Checks and Restrictions

The WAD field must be unique for each WAD in DBSAFE. There are legal value checks on WAD prefix (WAD type), Tracker, and Engineer.

The work group for the WAD is that of the DB engineer whose name appears in the Engineer field. The Engineer field may be changed to any DB engineer, thereby changing the WAD's work group, unless the WAD is assigned to a Tracker. Once associated with a Tracker, the Engineer field can only be changed to a DB engineer belonging to the same work group as the Tracker.

The Tracker associated with the WAD can be changed, but only to a Tracker that is owned by the same work group as the person identified in the Engineer field. The Tracker field can also be nulled. The capability to change or null the Tracker field is restricted because there must always be at least one WAD associated with every Tracker. Use care when creating Trackers because they cannot be deleted.

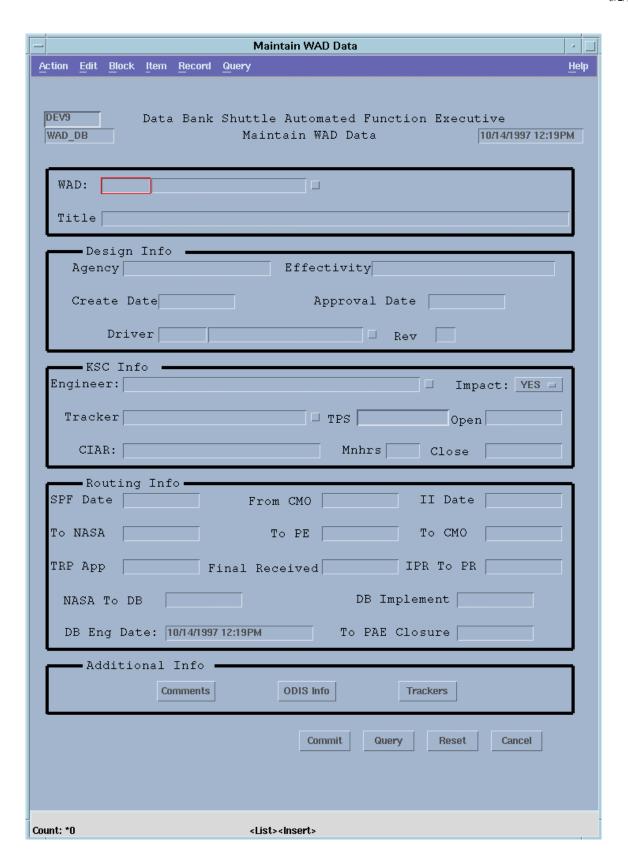


Figure 2-3 Maintain WAD Data (DB)

2.2.1.2 Queries

The Maintain WAD Data form supports queries on all WAD records regardless of work group. It also supports queries based on any field except the following:

- Tracker
- TPS
- TPS Open Date (Open)
- TPS Close Date (Close)

2.2.1.3 Inserts

The following fields are mandatory for creating a new WAD record:

- WAD (composed of two subfields):
 - WAD Type
 - WAD Number
- Engineer
- Impact
- CIAR

2.2.1.4 **Updates**

This form only allows modification of data belonging to the same work group as that of the operator. Any WAD field may be updated with the exception of the following:

- WAD A new WAD record must be created; use the Copy WAD function (refer to Section 2.6) to copy existing WAD data to a new WAD.
- TPS
- TPS Open Date (Open)
- TPS Close Date (Close)
- TRP Approval Date (TRP Appr)
- NASA To DB
- DB Eng Date automatically set to the current date/time when the WAD is reassigned to a new DB engineer.

2.2.1.5 **Deletes**

This form supports deletion of WAD records belonging to the same work group as that of the operator. When a WAD is deleted, its related records in the WAD_COMMENTS and ODIS_WAD tables are also deleted.

2.2.1.6 Special Processing

Button	<u>Effect</u>
<comments></comments>	Press this button to display the WAD Comments form (refer to Figure 2-11).
	The Maintain WAD Data form must have context on a new or existing WAD
	to activate the button. Upon exiting the WAD Comments form, the Maintain
	WAD Data form reappears with the current data still displayed. Refer to
	Section 2.9 for a full description of the WAD Comments form.
<odis info=""></odis>	Press this button to display the Maintain WAD ODIS Information form (refer
	to Figure 2-10). The Maintain WAD Data form must have context on a new
	or existing WAD to activate the button. Upon exiting the Maintain WAD
	ODIS Information form, the Maintain WAD Data form reappears with the
	current data still displayed. Refer to Section 2.8 for a full description of the
	Maintain WAD ODIS Information form.
<trackers></trackers>	Press this button to display the Maintain Tracker Data form (refer to Figure 2-
	8). The Maintain WAD Data form must have context on a new or existing
	WAD to activate the button. Upon exiting the Maintain Tracker Data form,
	the Maintain WAD Data form reappears with the current data still displayed.
	This button is the only mechanism that supports creating new Trackers in
	DBSAFE. Refer to Section 2.7 for a full description of the Maintain Tracker
	Data form.

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TABLE 2-2 WAD (DB) Elements

Label	Action	Default	Remarks
Wad	Q, A, D, L	None	Must be unique (two fields).
			• Type is LOV validated.
Title	A, Q, M, D	None	No validation.
Agency	A, Q, M, D	None	No validation.
Effectivity	A, Q, M, D	None	No validation.
Create Date	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
Approval Date	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
Driver	A, Q, M, D, L	None	No validation (two fields).
Rev	A, Q, M, D	None	No validation.
Engineer	A, Q, M,	Operator's name	LOV validated.
	D, L		• The WAD's work group is set to this engineer's work group.
Impact	A, Q, M, D	Yes	Poplist: Yes, No
Tracker	A, M, L	None	 Specify an existing Tracker or use <trackers> button to create/specify a new tracker. </trackers>
TPS		None	Display only.
Open		None	Display only.
CIAR	A, Q, M, D	Current WAD	No validation.
Mnhrs	A, Q, M, D	None	Must be numeric.
			• Range 0-9999.
Close		None	Display only.
SPF Date	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
From CMO	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
II Date	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
To NASA	A, Q, M, D	None	Date format: mm/dd/yyyy

			XX .1 11.1.2
			No other validation.
To PE	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
To CMO	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
TRP App	Q	None	Display only.
Final Received	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
IPR To PR	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
NASA To DB	Q	None	Display only.
DB Implement	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
DB Eng Date	Q	Current date and	No user input accepted.
		time	• Autofilled when WAD is added or engineer is changed.
PAE Closure	A, Q, M, D	None	Date format: mm/dd/yyyy
			No other validation.
*Query (Q), Add (A), Modify (M), I	Delete (D), List (L), Ed	it (E)

2.3 WAD PROCESSING - WAD (GSI)

Ground Software Integration (GSI) engineers query and modify WAD Data in DBSAFE using this form (refer to Figure 2-4). Additionally, the buttons at the bottom access other forms supporting maintenance of WAD Comments (refer to Section 2.9) and Tracker Data (refer to Section 2.7).

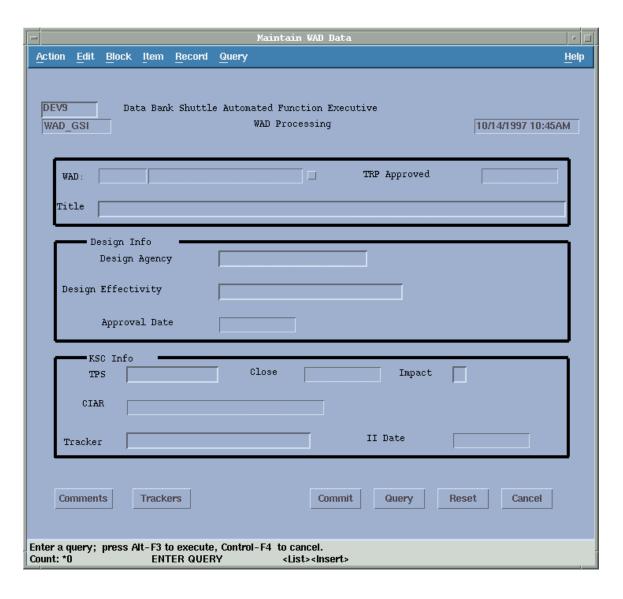


Figure 2-4 Maintain WAD Data (GSI)

2.3.1 FUNCTIONAL DESCRIPTION

The WAD Processing form exhibits standard Oracle® Run*Form functionality. New forms display when <Comments> or <Trackers> are pressed. Refer to Section 2.3.1.6 for special considerations associated with these two buttons.

2.3.1.1 Legal Value Checks and Restrictions

Creation and deletion of WADs are not supported.

2.3.1.2 Queries

The form supports queries based on the following fields:

- WAD (composed of two subfields):
 - WAD Type
 - WAD Number
- TRP Approved
- Approval Date
- CIAR
- II Date

2.3.1.3 Inserts

Inserts are not supported on this form.

2.3.1.4 **Updates**

Only the TRP Approved and CIAR fields can be modified.

2.3.1.5 Deletes

Deletes are not supported on this form.

2.3.1.6 **Special Processing**

Button	<u>Effect</u>
<comments></comments>	Press this button to display the WAD Comments form (refer to Figure 2-11).
	The WAD Processing form must have context on a new or existing WAD to
	activate the button. Upon exiting the WAD Comments form, the WAD
	Processing form reappears with the current data still displayed. Refer to
	Section 2.9 for a full description of the WAD Comments form.
<trackers></trackers>	Press this button to display the Maintain Tracker Data form (refer to Figure 2-

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8). The WAD Processing form must have context on a new or existing WAD to activate the button. Upon exiting the Maintain Tracker Data form, the WAD Processing form reappears with the current data still displayed. Refer to Section 2.7 for a full description of the Maintain Tracker Data form.

TABLE 2-3 WAD (GSI) Elements

Label	Action	Default	Remarks
WAD	Q, L	None	
TRP Approved	Q, M	None	Date format: mm/dd/yyyy
			No other validation.
Title		None	Display only.
Design Agency		None	Display only.
Design Effectivity		None	Display only.
Approval Date	Q	None	
TPS		None	Display only.
Close		None	Display only.
Impact		None	Display only.
CIAR	Q, M	None	No validation.
Tracker		None	Display only.
II Date	Q	None	
*Query (Q), Add (A),	Modify (M), D	elete (D), List (L), Ed	lit (E)

2.4 WAD PROCESSING – WAD (NASA)

NASA engineers query and modify WAD data using this form (refer to Figure 2-5). Additionally, the buttons at the bottom access other forms supporting maintenance of WAD Comments (refer to Section 2.9), ODIS Information (refer to Section 2.8), and Tracker Data (refer to Section 2.7).

2.4.1 FUNCTIONAL DESCRIPTION

The WAD Processing form exhibits standard Oracle® Run*Form functionality. There is a master-detail relationship between the WAD/Tracker/TPS fields and the multiline block of data beginning with the TPS Run ID. New forms are displayed when <Comments>, <ODIS Info>, or <Trackers> are pressed. Refer to Section 2.4.1.6 for special considerations associated with these three buttons.

2.4.1.1 Legal Value Checks and Restrictions

Creation and deletion of WADs are not supported.

2.4.1.2 Queries

The form supports WAD queries based on the following fields:

- WAD (composed of two subfields):
 - WAD Type
 - WAD Number
- NASA to DB
- Create Date
- Approval Date
- From CMO
- To CMO
- To NASA
- II Date
- IPR to PR
- TRP App
- DB Eng Date
- PAE Close

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The form supports normal Oracle® query characteristics for master-detail relationships on all fields of the detail block.

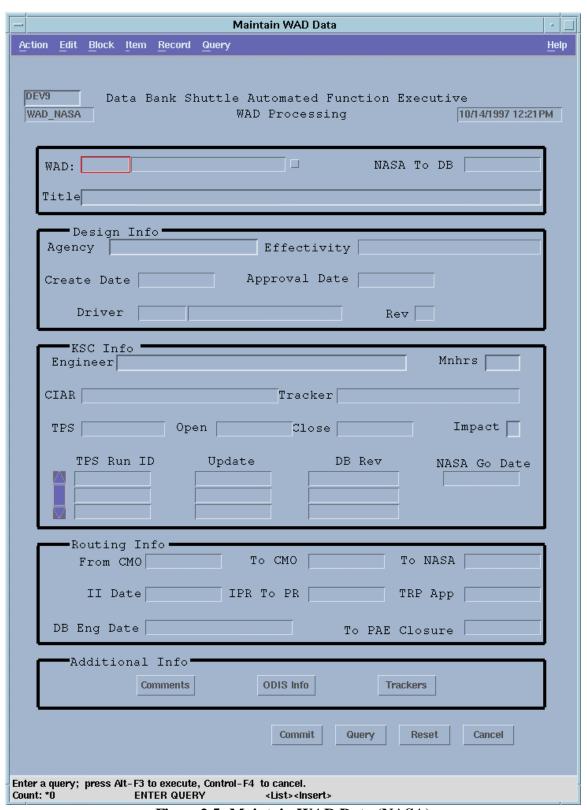


Figure 2-5 Maintain WAD Data (NASA)

2.4.1.3 Inserts

Inserts are not supported on this form.

2.4.1.4 **Updates**

Only the NASA To DB field can be modified.

2.4.1.5 **Deletes**

Deletes are not supported in this form.

2.4.1.6 **Special Processing**

Button	Effect
<comments></comments>	Press this button to display the WAD Comments form (refer to Figure 2-
	11). The WAD Processing form must have context on a new or existing
	WAD to activate the button. Upon exiting the WAD Comments form,
	the WAD Processing form reappears with the current data still displayed.
	Refer to Section 2.9 for a full description of the WAD Comments form.
<odis info=""></odis>	Press this button to display the Maintain WAD ODIS Information form
	(refer to Figure 2-10). The WAD Processing form must have context on
	a new or existing WAD to activate the button. Upon exiting the Maintain
	WAD ODIS Information form, the WAD Processing form reappears with
	the current data still displayed. Refer to Section 2.8 for a full description
	of the Maintain WAD ODIS Information form.
<trackers></trackers>	Press this button to display the Maintain Tracker Data form (refer to
	Figure 2-8). The WAD Processing form must have context on a new or
	existing WAD to activate the button. Upon exiting the Maintain Tracker
	Data form, the WAD Processing form reappears with the current data
	still displayed. Refer to Section 2.7 for a full description of the Maintain
	Tracker Data form.

TABLE 2-4 WAD (NASA)

Label	Action	Default	(AD (NASA) Remarks
WAD	Q, L	None	
NASA To DB	Q, M	None	Date format: mm/dd/yyyy
			No other validation.
Title		None	Display only.
Agency		None	Display only.
Effectivity		None	Display only.
Create Date	Q	None	
Approval Date	Q	None	
Driver		None	Display only.
Rev		None	Display only.
Engineer		None	Display only.
Mnhrs		None	Display only.
CIAR		None	Display only.
Tracker		None	Display only.
TPS		None	Display only.
Open		None	Display only.
Close		None	Display only.
Impact		None	Display only.
TPS Run ID	Q	None	
Update	Q	None	
DB Rev	Q	None	
NASA Go Date		None	Display only.
From CMO	Q	None	
То СМО	Q	None	

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To NASA	Q	None	
II Date	Q	None	
IPR To PR	Q	None	
TRP App	Q	None	
DB Eng Date	Q	None	
PAE Close	Q	None	
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

2.5 WAD PROCESSING – WAD (PAE)

Product Assurance engineers (PAEs) query and modify WAD data using this form (refer to Figure 2-6). Additionally, the buttons at the bottom access other forms supporting maintenance of WAD Comments (refer to Section 2.9), ODIS Information (refer to Section 2.8), and Tracker Data (refer to Section 2.7).

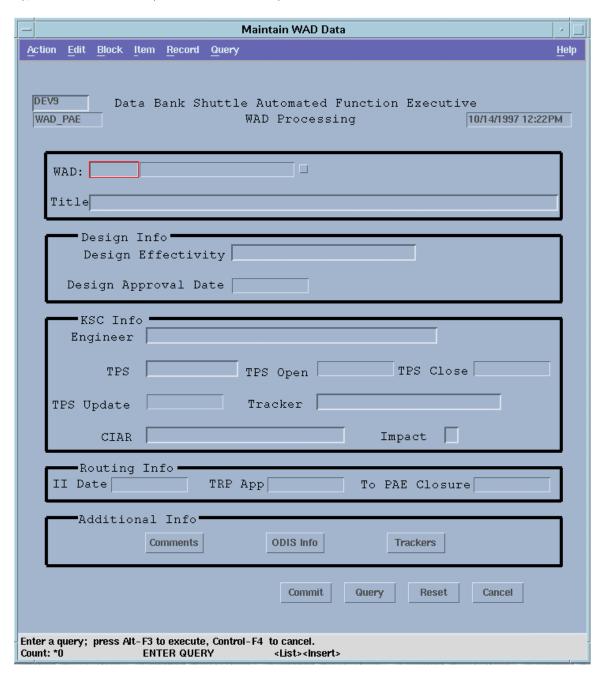


Figure 2-6 Maintain WAD Data (PAE)

2.5.1 FUNCTIONAL DESCRIPTION

The WAD Processing form exhibits standard Oracle® Run*Form functionality. New forms display when <Comments>, <ODIS Info>, or <Trackers> are pressed. Refer to Section 2.5.1.6 for special considerations associated with these three buttons.

2.5.1.1 Legal Value Checks and Restrictions

This form supports queries only.

2.5.1.2 Queries

The form supports queries based on the following fields:

- WAD (composed of two subfields):
 - WAD Type
 - WAD Number
- Design Approval Date
- II Date
- TRP App
- PAE Closure

2.5.1.3 Inserts

Inserts are not supported on this form.

2.5.1.4 Updates

Updates are not supported on this form.

2.5.1.5 Deletes

Deletes are not supported on this form.

2.5.1.6 **Special Processing**

Button	<u>Effect</u>
<comments></comments>	Press this button to display the WAD Comments form (refer to Figure 2-11).
	The WAD Processing form must have context on a new or existing WAD to
	activate the button. Upon exiting the WAD Comments form, the WAD
	Processing form reappears with the current data still displayed. Refer to
	Section 2.9 for a full description of the WAD Comments form.
<odis info=""></odis>	Press this button to display the Maintain WAD ODIS Information form
	(refer to Figure 2-10). The WAD Processing form must have context on a
	new or existing WAD to activate the button. Upon exiting the Maintain
	WAD ODIS Information form, the WAD Processing form reappears with the
	current data still displayed. Refer to Section 2.8 for a full description of the
	Maintain WAD ODIS Information form.
<trackers></trackers>	Press this button to display the Maintain Tracker Data form (refer to Figure
	2-8). The WAD Processing form must have context on a new or existing
	WAD to activate the button. Upon exiting the Maintain Tracker Data form,
	the WAD Processing form reappears with the current data still displayed.
	Refer to Section 2.7 for a full description of the Maintain Tracker Data form.

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TABLE 2-5 WAD (PAE)

WAD Title Design Effectivity Design Approval Date Engineer Driver TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q TRP App Q	None None None None	Display only. Display only.			
Design Effectivity Design Approval Date Engineer Driver TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q	None				
Effectivity Design Approval Q Date Engineer Driver TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q		Display only.			
Design Approval Date Engineer Driver TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q	None				
Date Engineer Driver TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q	None				
Driver TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q					
TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q	None				
TPS TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q	None	Display only.			
TPS Open TPS Close TPS Update Tracker CIAR Impact II Date Q		· · ·			
TPS Close TPS Update Tracker CIAR Impact II Date Q	None	• Display only.			
TPS Update Tracker CIAR Impact II Date Q	None	Display only.			
Tracker CIAR Impact II Date Q	None	Display only.			
CIAR Impact II Date Q	None	• Display only.			
Impact II Date Q	None	• Display only.			
II Date Q	None	• Display only.			
	None	• Display only.			
TRP Ann O	None				
ти прр	None				
PAE Close Q	None				
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)					

2.6 COPY WAD - COPY WAD

The Copy WAD form creates a new WAD in the WORK_AUTHORIZATION table by copying the data from an existing WAD (refer to Figure 2-7). Copy WAD simplifies creation of multiple WADs from a single source by eliminating the need to enter redundant data for each WAD.

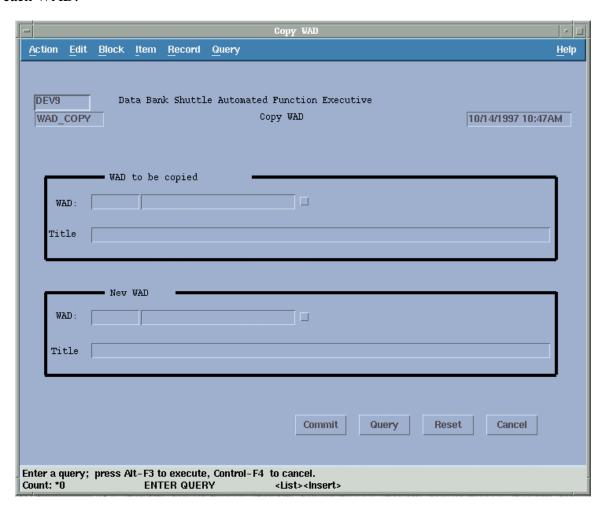


Figure 2-7 Copy WAD

2.6.1 FUNCTIONAL DESCRIPTION

This is a custom form and should only be used as defined below. Copy functionality is supported by querying an existing WAD, then specifying a target WAD number and optional title to receive the copied information.

2.6.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the WAD to be copied actually exists in the database and that the new WAD prefix (WAD type) is valid. The WAD specified in the New WAD block must be unique.

2.6.1.2 **Queries**

Standard Oracle® Run*Form query functionality is supported for all fields in the WAD to be copied block.

2.6.1.3 Inserts

The following fields are mandatory in the New WAD block:

- WAD (composed of two subfields):
 - WAD Type
 - WAD Number

2.6.1.4 **Updates**

Updates are not supported in this form.

2.6.1.5 **Deletes**

Deletes are not supported in this form.

2.6.1.6 Special Processing

When <Commit> is pressed, the form creates a new record in the WORK_AUTHORIZATION table and copies data from the specified WAD to be copied into the new record. The new record duplicates the original WAD except for the following table columns:

<u>Column</u>	<u>Data</u>
WAD_TYPE	Specified by the user.
WAD_NUMBER	Specified by the user.
DB_ENG_DATE	Current date and time.
TITLE	Copied from the original WAD unless the user specifies a
	title.
TRACKER	Null.
MANHOURS	Null.

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TRP_DISPOSITION_DATE	Null.
FINAL_ENG_RECEIVED_DATE	Null.
NASA_TO_DB_DATE	Null.
DB_IMPLEMENTED_DATE	Null.
TO_PAE_CLOSURE_DATE	Null.

TABLE 2-6 Copy WAD Elements

Block	Label	Action	Default	Remarks
WAD to be copied	WAD	Q, L	None	LOV for query only.
	Title	Q	None	
New WAD	WAD	L	None	 Must be unique (two fields). Type is LOV validated.
	Title		None	No validation.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

2.7 MAINTAIN TRACKER DATA – TRACKER DATA

The Maintain Tracker Data form is used to create and maintain tracker numbers and effectivity equations, create a Test Preparation Sheet (TPS) and maintain the tracker-to-TPS association (refer to Figure 2-8).

When initiated from the Maintain WAD Data form (refer to Section 2.2), the Maintain Tracker Data form is fully functional, restricted only by the bounds of work group authority and the normal legal value checks and restrictions. At least one effectivity equation must be specified when a tracker is created. New trackers are assigned to the work group of the Data Bank engineer who creates them. There is no facility in DBSAFE for changing the work group after the tracker is created.

When initiated from the main menu or any of the WAD Processing forms (GSI, NASA, or PAE), the Maintain Tracker Data form is fully functional within the same bounds above except that it does not support creation of new trackers. Even though a tracker is owned by the work group that created it, a tracker effectivity equation may be defined by any work group. The tracker effectivity equations are used by the TCID component of DBSAFE to determine VCN and Format lists for a TCID build. A TCID in DBSAFE is owned by a work group, and only that work group's tracker effectivity equations are processed to determine the list of trackers applicable to the TCID. The VCN and Format lists (TCID Build specifications) are based on that list of applicable trackers.

Therefore, the tracker effectivity equation defines the TCID Build specifications for which the engineering data entered into the database shall be applicable. A tracker effectivity equation is defined by one or more *expressions*. An expression is made up of one or more effectivity names and values. Multiple effectivity names and values within an expression are *and'ed* together as illustrated on the form. Expressions defined by a work group are *or'ed* together to define the tracker effectivity equation for that work group. Maintenance of the effectivity equations is supported throughout the life of a tracker so they can remain current with changing mission/test requirements.

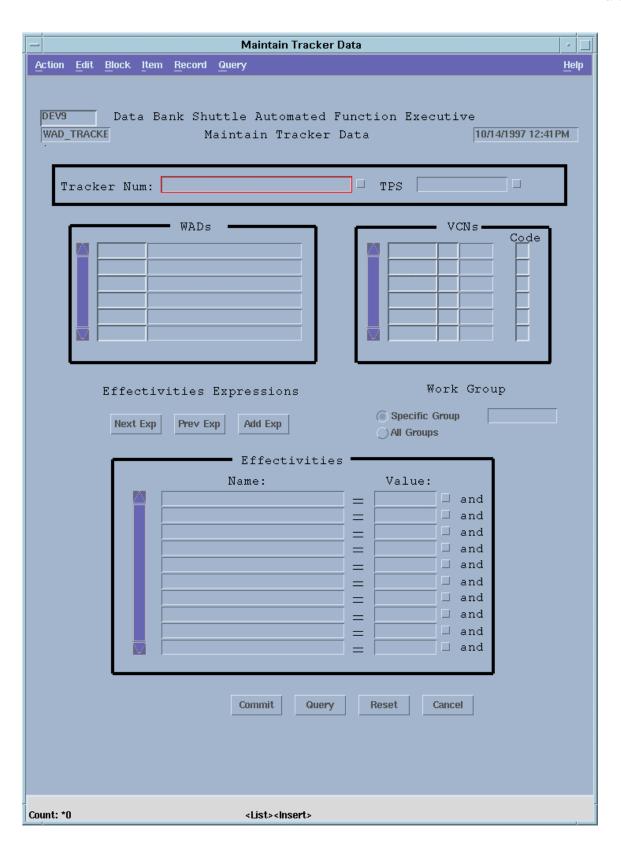


Figure 2-8 Maintain Tracker Data

2.7.1 FUNCTIONAL DESCRIPTION

This is a custom form and should only be used as defined below. When Enter Query mode is selected, a pop-up screen appears (refer to Figure 2-9) to facilitate queries based on WAD, Tracker number, or VCN. Refer to Section 2.7.1.2 for special processing considerations associated with this pop-up.

If a new TPS is specified, a pop-up message informs the operator that the specified TPS does not exist in the database and asks if they would like to add it. If the response is <Yes>, the TPS is considered valid and will be added to the database upon committing.

The WADs and VCNs blocks are display only.

There is a master-detail relationship between the Tracker Num field and the Effectivities block, but <Next Exp>, <Prev Exp>, <Add Exp>, and the Work Group radio buttons must be used to add or view expressions. Refer to Section 2.7.1.3 through 2.7.1.5 for special considerations associated with the Effectivities block.

When the form is initiated from Maintain WAD Data or any of the WAD Processing forms (GSI, NASA, or PAE), the standard <Commit> button is replaced by <Post> and an additional <Prev> button appears at the bottom of the form (refer to Figure 2-11). Refer to Section 2.7.1.6 for special considerations associated with these buttons.

A pop-up message may appear when an invalid Effectivity Name or Value is entered for an effectivity expression. This pop-up provides authorized operators with access to the Maintain Effectivity Data form (refer to Figure X-XX). Refer to Section 2.7.1.6 for special considerations associated with this form.

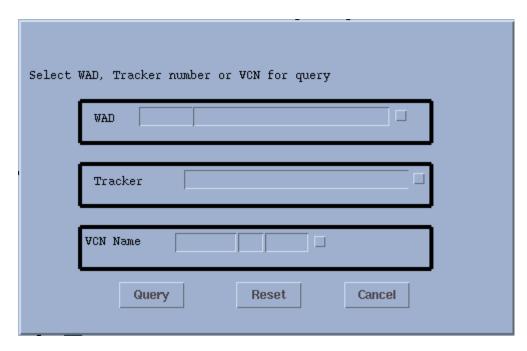


Figure 2-9 Select Query Pop-Up

2.7.1.1 Legal Value Check and Restrictions

The Tracker Num field must be unique for each Tracker created in DBSAFE. There are legal value checks on Tracker Num, TPS, Effectivity Name, and Effectivity Value fields. An Effectivity Name can only be used once within an expression.

2.7.1.2 Queries

Queries are supported primarily through custom interfaces. The only standard Oracle® Run*Form functionality available is Execute Query in the Tracker Num field; it retrieves all the trackers in the database.

Enter Query in the Tracker Num block activates a pop-up screen that supports user specification of query selection criteria (refer to Figure 2-9). The operator specifies either a complete WAD, a complete VCN, or a Tracker upon which to base the query. Wild card specifications are supported only in the Tracker field. Three buttons are at the bottom of the Query subpanel:

Button	<u>Effect</u>
<query></query>	Executes the query when valid selection criteria is entered.
<reset></reset>	Clears the Query subpanel only.
<cancel></cancel>	Cancels the query and deactivates the pop-up screen.

Standard Oracle® Run*Form queries within the WADs and VCNs blocks are not supported. Queries based on WAD and VCN selection criteria are supported via the pop-up screen described above.

Within the Effectivities block, queries are supported via the Work Group radio button. By default, only the expression(s) for the operator's work group are initially queried for a tracker. Only one expression is displayed in the Effectivities block at a time and <Next Exp> and <Prev Exp> must be used to navigate through queried expressions. Expressions are automatically requeried when the operator presses <All Groups> or presses <Specific Group> and selects a work group from the list of values (LOV) that is automatically displayed. The Work Group field identifies the work group that owns the displayed expression. The button functions are summarized below:

<u>Button</u>	<u>Effect</u>
<specific group=""></specific>	Displays an LOV from which the operator can select a work group.
	The form then requeries expressions for the selected work group.
<all groups=""></all>	Requeries the expressions for all groups.
<next exp=""></next>	Shows the next Effectivities expression.
<prev exp=""></prev>	Shows the previous Effectivities expression.

2.7.1.3 Inserts

This form only supports creation of new trackers when it is initiated from the Maintain WAD Data form with context on an active WAD that has not been assigned a tracker. A new tracker must have an effectivity equation assigned when it is created. The TPS field is optional.

Inserts are not supported in the WADs or VCNs blocks. Within the Effectivities block, creation of a new expression is supported via the <Add Exp> button:

Button	<u>Effect</u>
<add exp=""></add>	Clears the Effectivities block in preparation for entering the
	Effectivity Name(s) and Value(s) defining a new expression; sets the
	Work Group field to the operator's work group.

Effectivity Name(s) and Value(s) can be added to an existing expression using standard Oracle® Run*Form techniques, but only if the expression is owned by the same work group as the operator.

2.7.1.4 **Updates**

This form supports TPS field modification. However, once a Tracker is associated with a TPS, the TPS field cannot be updated to null. The TPS field cannot be modified after the

TPS is closed, i.e., after the TPS Close Date is specified via the PAE/NASA Lock and Review form (refer to Section X.X).

The form also supports modification of the Effectivities Value field in any expression owned by the same work group as that of the operator.

2.7.1.5 Deletes

Trackers cannot be deleted.

The form supports deletion of an Effectivity Name and Value within any expression owned by the same work group as that of the operator. To delete an entire expression, simply delete all the Effectivities Names and Values that define the expression. However, the last expression cannot be deleted because each tracker must have at least one expression.

2.7.1.6 Special Processing

If the Maintain Tracker Data form is initiated from another form rather than the main menu, all changes are posted to the database instead of being committed. The standard <Commit> button on the Maintain Tracker Data form is replaced by <Post>. A button labeled <Prev> also appears. This button posts any pending changes and then returns to the calling form. The operator must commit or cancel the posted changes on the calling form.

If an invalid Effectivities Name or Value is specified for an expression, an operator with permissions to run the Maintain Effectivity Data form is notified that the specified name/value does not exist in the legal table and asked if they would like to add it. If the response is <Yes>, the Maintain Effectivity Data form displays to allow the operator to update the legal tables (refer to Figure X-XX). Upon exiting the Maintain Effectivity Data form, all changes are posted to the database and the Maintain Tracker Data form reappears with the current data still displayed. The operator must commit or cancel the posted changes on the Maintain Effectivity Data form. Refer to Section X.X for a full description of the Maintain Effectivity Data form.

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TABLE 2-7 Maintain Tracker Data Elements

Label	Action	Default	Remarks
Tracker Num	A, Q, L	None	Must be unique.
TPS	A, M, L	None	LOV validated.
WADs		None	Display only.
VCNs		None	Display only.
Code		None	Display only.
Work Group	Q, L	Operator's work group	User input via LOV only.
Name	A, D, L	None	• LOV validated.
Value	A, Q, M	None	LOV validated.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

TABLE 2-8 Maintain Tracker Data, Query Pop-up Elements

			entally 2 of the Electronia		
Label	Action	Default	Remarks		
WAD	L	None	LOV validated (two fields).		
Tracker	L	None	Supports wildcard specification.		
VCN Name None • LOV validated (three fields).					
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)					

2.8 MAINTAIN WAD ODIS INFORMATION – WAD TO FD ODIS

The Maintain WAD ODIS Information form supports identification of the Owner Disciplines (ODISs) impacted by a WAD (refer to Figure 2-10). The form displays the distinct list of ODISs for the set of FDs entered on the left side of the form. The data is for user evaluation only and is not required to support the change authorization and approval cycle for implementing changes to the database.

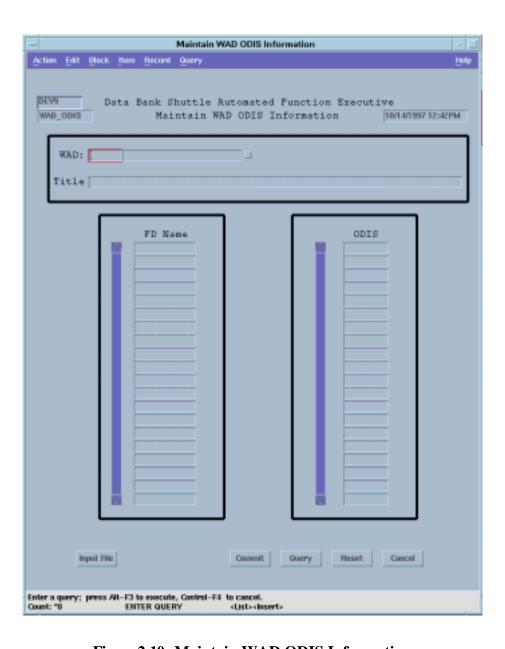


Figure 2-10 Maintain WAD ODIS Information

2.8.1 FUNCTIONAL DESCRIPTION

This form can be initiated from the Maintain WAD Data form, any of the WAD Processing forms (GSI, NASA, or PAE), or from the DBSAFE main menu. When initiated from any of the WAD forms, the Maintain WAD ODIS Information form automatically queries the data for the WAD that the calling form has context on, the standard <Commit> button is replaced by <Post>, and an additional <Prev> button appears at the bottom of the form. Refer to Section 2.8.1.6 for special considerations associated with these buttons.

This form exhibits standard Oracle® Run*Form functionality with one exception: when changes to the FD list are posted or committed, the corresponding ODIS data is requeried and displayed for the set of FDs in the list. There is a master-detail relationship between the WAD number and the multiline block containing FD Names. The WAD block supports queries only; no data can be created, changed or deleted. The ODIS block is for display only.

2.8.1.1 Legal Value Checks and Restrictions

The FD field must be unique within the context of a WAD.

2.8.1.2 Queries

The form supports queries based on any field in the WAD (master) block. The form supports normal Oracle® query characteristics for master-detail relationships within the FD Name (detail) block. Queries are not supported within the ODIS block.

2.8.1.3 Inserts

Inserts are only supported in the block containing the FD Names. The operator may enter an existing FD or a new FD (not yet in the database as either a Real or Pending FD). In the last case, the operator is warned that the specified FD does not exist, but the warning is just for information. The form supports standard DBSAFE Input-from-a-File functionality (refer to Section A.1). The temporary table through which data is loaded is described below:

DBSAFE.TEMP_FD_ODIS
FD_NAME NOT NULL VARCHAR2(10)

2.8.1.4 **Updates**

Updates are not supported in this form.

2.8.1.5 **Deletes**

Deletes are only supported in the block containing the FD Names.

2.8.1.6 Special Processing

If the Maintain WAD ODIS Information form is initiated from another form rather than the main menu, all changes are posted to the database instead of being committed. The standard <Commit> button on the form is replaced by <Post> (refer to Figure 2-10). A button labeled <Prev> also appears. This button posts any pending changes and then returns to the calling form. The operator must commit or cancel the posted changes on the calling form.

TABLE 2-9 Maintain WAD ODIS Information Elements

	171DEE 2-9 Maintain WID ODIS Information Elements				
Label	Action	Default	Remarks		
WAD	Q, L	None	LOV for query only.		
Title	Q	None			
FD Name	A, Q, D	None	Must be unique for WAD.		
ODIS		None	Display only.		
*Ouery (O), Add (A), Modify (M), Delete (D), List (L), Edit (E)					

2.9 WAD COMMENTS

The WAD Comments form supports maintenance of comments in the database about a WAD. Comments are maintained separately for Data Bank, GSI, NASA, and PAE engineers (refer to Figure 2-11).

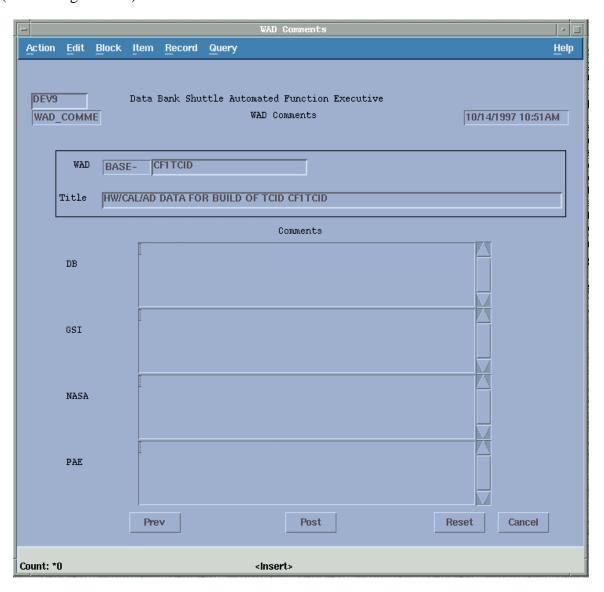


Figure 2-11 WAD Comments

2.9.1 FUNCTIONAL DESCRIPTION

This is a custom form and should only be used as defined below. This form can only be initiated from the Maintain WAD Data form or any of the WAD Processing forms (GSI, NASA, or PAE). The Maintain WAD ODIS Information form automatically queries the data for the WAD that the calling form has context on.

The standard <Query> button does not appear because the form only supports maintenance of data for the WAD that the calling form has context on. The standard <Commit> button is replaced by a <Post> button and an additional <Prev> button appears at the bottom of the form. Refer to Section 2.9.1.6 for special considerations associated with these buttons.

2.9.1.1 Legal Value Checks and Restrictions

Rights to maintain DB, GSI, NASA, or PAE comments are determined by the operator's role assignments (the menu functions the operator is authorized to execute) as described below. Those having several roles, such as PAE and NASA, are allowed to maintain comments for all authorized areas.

<u>Comments</u>	<u>Role</u>
DB	Maintain WAD Data - WAD (DB)
GSI	WAD Processing - WAD (GSI)
NASA	WAD Processing - WAD (NASA)
PAE	WAD Processing - WAD (PAE)

2.9.1.2 Queries

The form automatically queries the data for the WAD that the calling form has context on. Independent query functionality is not supported in this form.

2.9.1.3 Inserts

The form only supports the creation of new comment records in the field(s) corresponding to the operator's functional role(s) as explained in Section 2.9.1.

2.9.1.4 **Updates**

The form only supports updates of comments in the field(s) corresponding to the operator's functional role(s) as explained in Section 2.9.1.

2.9.1.5 Deletes

The form only supports deletion of comments in the field(s) corresponding to the operator's functional role(s) as explained in Section 2.9.1.

2.9.1.6 Special Processing

The standard <Commit> button is replaced by a <Post> button and changes are posted to the database instead of being committed. The <Prev> button posts any pending changes and then returns to the calling form. The operator must commit or cancel the posted changes on the calling form.

TABLE 2-10 WAD Comments Elements

Label	Action	Default	Remarks
WAD		N/A	Display only.
Title		None	Display only.
Comments DB GSI NASA PAE	A, M, D, E	None	No validation.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

2.10 RENAME WAD TYPE - RENAME > WAD TYPE

The Rename WAD Type form provides the capability to globally rename a WAD type throughout the database (refer to Figure 2-12).



Figure 2-12 Rename WAD Type

2.10.1 FUNCTIONAL DESCRIPTION

This is a custom form and should only be used as defined below. Rename functionality is supported by querying an existing WAD Type and then specifying the new WAD Type.

2.10.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the WAD Type to be renamed actually exists in the database and that the new WAD Type specified is unique.

2.10.1.2 Queries

Standard Oracle® Run*Form functionality is supported for the WAD Type field.

2.10.1.3 Inserts

Inserts are not supported in this form.

2.10.1.4 Updates

Updates are not supported in this form.

2.10.1.5 Deletes

Deletes are not supported in this form.

2.10.1.6 Special Processing

When <Commit> is pressed, all occurrences of the value queried in the WAD Type field change to the value specified in the Rename WAD Type to field.

TABLE 2-11 Rename WAD Type Elements

Label	Action	Default	Remarks	
WAD Type	Q, L	None	LOV for query only.	
Rename WAD		None	Must be unique.	
Type to			-	
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

3. EVALUATE ENGINEERING

TBD

4. IMPLEMENT

TBD

5. MFSDT

TBD

6. BASELINE

TBD

7. TCID

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TBD

8. CLEANUP

TBD

9. DBSAFE CONTROL – DBSAFE CONTROL

The DBSAFE Control component of DBSAFE is the primary software interface for the data managed by the DBSAFE data administrator. The primary function is to allow the administrator to authorize and manage each person's permissions to DBSAFE functions and data. Other functions maintain FD database information in the following categories:

- Engineering Units
- Enumerated Classes
- Hardware Interface Module (HIM) card types
- HIM Reference Designator (REFDES) and drawing information
- Multiplexer Demultiplexer (MDM) card types
- Owner Disciplines (ODISs)
- Responsible Systems (RSYSs)
- State Classes
- Vehicle Configuration Number (VCN) groups and maintenance modes

9.1 CHANGE ACCESS WORD - CHANGE ACCESS WORD

The Change Access Word form is used to change the password of the DBSAFE_USER database role (refer to Figure 9-1). The DBSAFE_USER role controls insert, update, and delete privileges on most DBSAFE database tables. It also controls privileges to execute stored database procedures owned by DBSAFE.

When an authorized person initiates DBSAFE, the main menu looks up the password and sets the person's role to DBSAFE_USER. This provides the operator with permissions to use DBSAFE applications to maintain DBSAFE data. The role assignment terminates when the operator exits the DBSAFE menu. The password can be changed any time a DBSAFE Data Administrator suspects it has been compromised.



Figure 9-1 Change Access Word

9.1.1 FUNCTIONAL DESCRIPTION

This is a custom form and should only be used as defined below. To change the password, the operator must specify a new access word and press <Commit>. The new access word is stored in the DBSAFE database and the DBSAFE_USER password is changed. The specified access word is not the actual password for the DBSAFE_USER database role. The

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software uses an encryption routine maintained by the LSDN group. The access word is the key passed to the encryption routine.

9.1.1.1 Legal Value Checks and Restrictions

None.

9.1.1.2 **Queries**

Queries are not supported on this form.

9.1.1.3 Inserts

Inserts are not supported on this form.

9.1.1.4 **Updates**

The Enter New Access Word field is required to change the access word.

9.1.1.5 **Deletes**

Deletes are not supported on this form.

TABLE 9-1 Change Access Word Elements

		/ _ Ondingerie	0000 // 010 2101110110
Label	Action	Default	Remarks
Enter New Access Word	M	None	No validation.
*Ouery (O), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

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9.2 MAINTAIN MENU FUNCTION DATA – DBSAFE ROLES

The Maintain Menu Function Data form is used to maintain the list of persons authorized to execute a controlled DBSAFE function (refer to Figure 9-2). All functions (i.e., menu items) that support modification of data in the database are handled as controlled functions by the DBSAFE main menu. Functions that do not modify data (mostly reports) are not managed and are accessible by any person with access to the DBSAFE main menu. This form manages the same data as the DBSAFE Menu/Parent Functions block of the Maintain User Data form, but in that form, the perspective is on the list of functions that a person is authorized to use. Refer to Section 9.3 for a full description of the Maintain User Data form.

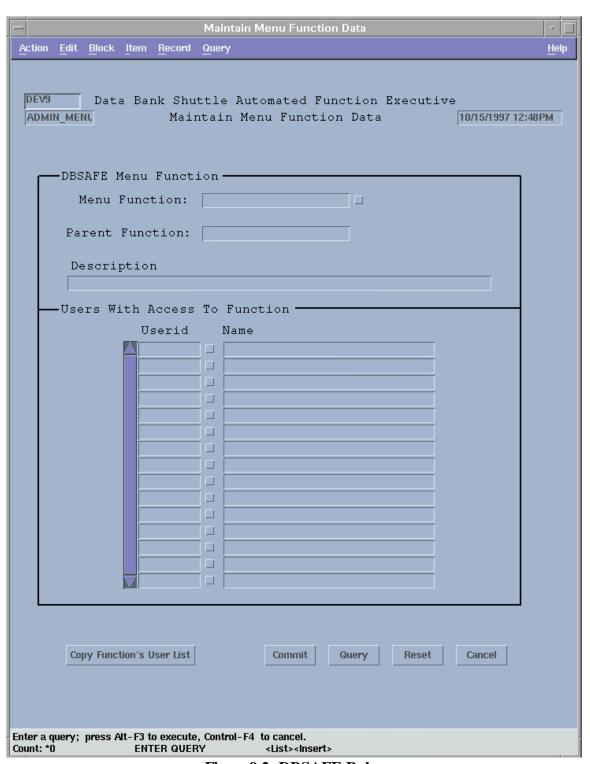


Figure 9-2 DBSAFE Roles

9.2.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality. There is a master-detail relationship between the DBSAFE Menu function block and the Users With Access To Function block.

A popup screen appears when <Copy Function's User List> is pressed. Refer to Section 9.2.1.6 for special processing associated with this button.

9.2.1.1 Legal Value Checks and Restrictions

The Userid field must be unique within the context of each Menu/Parent Function. There is also a legal value check on the Userid field.

9.2.1.2 Queries

The form supports queries based on any field except Parent Function in the top block and Name in the detail block. The form supports normal Oracle® query characteristics for master-detail relationships.

9.2.1.3 Inserts

Inserts are only supported in the detail block. The Userid field is required for creating new records in the detail block.

9.2.1.4 Updates

Updates are not supported in this form.

9.2.1.5 **Deletes**

Deletes are only supported in the detail block.

9.2.1.6 Special Processing

Button Effect

<Copy Function's User List>

Press to display the Copy Function's User List popup screen (refer to Figure 9-3). This function appends the list of persons authorized to run a specified Menu/Parent Function to the end of any userids currently listed on the main screen. When the copy is complete, the popup screen closes and the additional userids are listed in the detail block of the main screen. <Commit> must be pressed to save the copied data in the database.

The Copy Function's User List popup screen has two buttons:

Button Effect

<OK> Initiates the copy function for the specified Menu/Parent Function.

<Cancel> Dismisses the popup screen.

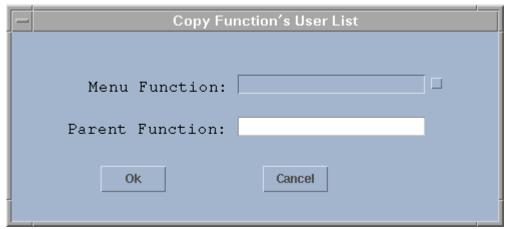


Figure 9-3 Copy Function's User List Popup Screen

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TABLE 9-2 Maintain Menu Function Data Elements

Label	Action	Default	Remarks
Menu	Q, L	None	LOV for query only.
Function			
Parent Function		None	Display only.
Description	Q	None	LOV validated.
Userid	A, Q, D, L	None	LOV validated.
Name		None	Display only.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

TABLE 9-3 Copy Function's User List Popup Elements

Label	Action	Default	Remarks
Menu	A, L	None	LOV validated.
Function			
Parent Function	A	None	Must be valid for the specified menu
			function.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.3 MAINTAIN USER DATA – USER

The Maintain User Data form is used to manage DBSAFE user information and access privileges (refer to Figure 9-4). Personnel authorized to use this form are DBSAFE administrators because they control the key elements that define each individual's access to DBSAFE functions and data. These key elements are:

Status

Access to the DBSAFE menu is determined first by ensuring the person's Oracle® userid exists in the DBSAFE USER table, and then by checking to see if the status column in that record is set to active. Setting the status to inactive takes effect the next time a user attempts to initiate a DBSAFE session; it does not affect any DBSAFE session(s) the user may be running currently.

Work Group

Records related to TCIDs, Trackers, MFSDT Input Files, etc., are tagged with the work group of the person that creates them. Thereafter, only people belonging to that work group can modify data associated with those records. Changing the work group could adversely affect the operation of any DBSAFE form the person is running, so ensure the person is out of DBSAFE before modifying their work group. Refer to Section 9.3.1.1 for restrictions that apply to work group modification.

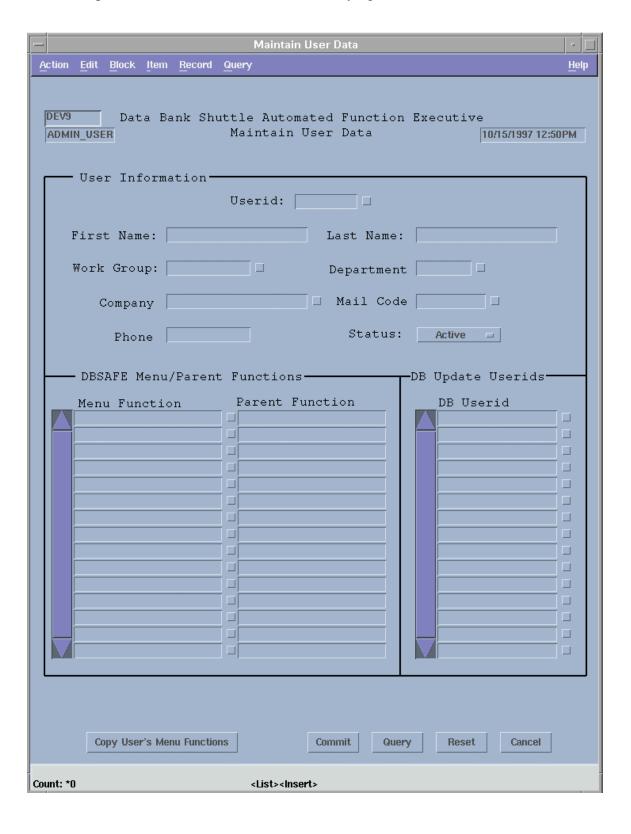
Menu Function(s)

Permissions to execute one or more controlled DBSAFE functions must be granted to an individual via this form. All functions (i.e., menu items) that support modification of information in the database are handled as controlled functions by the DBSAFE menu. Modifications to a user's menu functions take effect the next time a user initiates a DBSAFE session; it does not affect any sessions the user may have running currently.

• DB Userid(s)

Compiler, hardware and address records in the FD database are created and maintained within the context of a selected DB Userid. During the review and approval cycle for pending changes to the FD database, PAE and NASA engineers are only allowed to approve (lock) data belonging to the DB Userid(s) that they, as individuals, are authorized to work on. Permissions to use one or more DB Userids are granted to an

individual via this form. Modifying the list of DB Userids a person is authorized to use could adversely affect the operation of any DBSAFE form the person is running, so ensure the person is out of DBSAFE before modifying their list.



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Figure 9-4 Maintain User Data

9.3.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality. Two master-detail relationships exist: one between the User Information block and the DBSAFE Menu/Parent Functions block and the other between the User Information block and the DB Update Userids block. A popup screen appears when <Copy User's Menu Functions> is pressed (refer to Figure 9-5). Refer to Section 9.3.1.6 for special processing associated with this button.

9.3.1.1 Legal Value Checks and Restrictions

The Userid field in the User Information block must be unique. The Menu Function and DB Userid fields of the respective detail blocks (within the context of the Userid in the master block) must also be unique.

A legal value check on Work Group alerts the operator that a work group will be created when a group is specified that does not already exist. Refer to Section 9.3.1.4 for restrictions on changing a person's work group assignment.

9.3.1.2 Queries

The form supports normal Oracle® query characteristics for master-detail relationships based on any field on the form.

9.3.1.3 Inserts

The following fields are mandatory for defining a new DBSAFE user:

- Userid
- First Name
- Last Name
- Work Group ID
- Status

A userid cannot be added until the person's Oracle® account is established. Refer to Section 1.1.1 for prerequisites for DBSAFE access. All fields are mandatory for creating new records within the two detail blocks.

9.3.1.4 **Updates**

Any field can be updated except Userid in the User Information block. Updates are not supported in the two detail blocks.

A user's work group cannot be changed if the user is the DB engineer identified for a WAD tied to a Tracker that is 'in work'. This is because that would indirectly change the work group ownership of the WAD at a point in time when it is illegal. 'In work' covers the time between the WAD being assigned to a Tracker and when the first TPS Run ID associated with the WAD-Tracker-TPS structure is made real. Once a Run ID is made real, the TPS is permanently locked by DBSAFE and no more work is allowed under that Tracker-TPS.

9.3.1.5 **Deletes**

Records in any block can be deleted on this form. Userids are physically deleted if they are not needed to maintain data integrity in other tables in the database. If the userid cannot be physically deleted, a message displays and Status is set to inactive. The operator must then press <Commit> to logically remove the userid (Status is set to inactive). The operator must then press the Commit button to logically remove the Userid (the status is set to inactive).

The form will not allow deletion of the last userid with permissions to execute this form.

9.3.1.6 **Special Processing**

Button Effect

<Copy User's Menu Functions>

Press to display the User List Popup screen. This function appends the functions authorized for a specified userid to the end of any functions currently listed on the main screen. When the copy is complete, the popup screen closes and the additional functions display in the DBSAFE Menu/Parent Functions block. <Commit> must be pressed to save the copied information to the database.

The User List Popup has two buttons:

<u>Button</u> <u>Effect</u>

<OK> Initiates the copy function using the specified Userid.

<Cancel> Dismisses the popup screen.



Figure 9-5 User List Popup

TABLE 9-4 Maintain User Data Elements

Label	Action	Default	Remarks	
Userid	A, Q, D, L	None	LOV validated.	
First Name	A, Q, M, D	User's first name	Auto-filled via userid LOV.	
Last Name	A, Q, M, D	User's last name	Auto-filled via userid LOV.	
Work Group	A, Q, M, D, L	None		
Department	A, Q, M, D, L	None	No validation.	
Company	A, Q, M, D, L	None	No validation.	
Mail Code	A, Q, M, D, L	None	No validation.	
Phone	A, Q, M, D	None	• Format: 999-999-9999	
Status	A, Q, M, D	Active	Poplist: Active, Inactive	
Menu Function	A, Q, D	None	LOV validated.	
Parent Function	A, Q, D	None	Auto-filled via Menu Function LOV	
DB Userid	A, Q, D, L	None	LOV validated.	
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

TABLE 9-5 Maintain User Data User List Popup Elements

Label	Action	Default	Remarks	
Userid	L	None	LOV validated.	
*Ouery (O), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.4 MAINTAIN DB USERID DATA – DB USERID

The Maintain DB Userid Data form is used to maintain DB Userids in the FD database (refer to Figure 9-6). DB Userids manage user privileges to subsets of identical types of FD data. Every compiler record and every hardware/address baseline is tagged with the DB Userid that initially created it. Persons with rights to use a DB Userid can create new records and modify or delete existing records owned by that DB Userid. This allows different groups or contractors to manage their own data in the FD database without risking modification of data managed by someone else.

9.4.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality. There is a master-detail relation between the Data Bank Userid block and the Detail Info block. The Detail Info block only supports queries and does so only when <Detail Info> is pressed. This deferred query method is used because the data is calculated realtime and could take a few seconds to display.

Creating, modifying, or deleting a DB Userid increments the FD database revision number as described in Section 1.X. Data belonging to a DB Userid can be frozen by setting the User Auth field to None. Thereafter, TPS Run Ids cannot be created using that DB Userid to update the FD database. Setting the User Auth field to Manager activates the DB Userid for use by authorized persons.

Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. Deleting a DB Userid immediately purges the userid and most of the data associated with it. Refer to Section 9.4.1.5 for special processing associated with deleting a DB Userid.

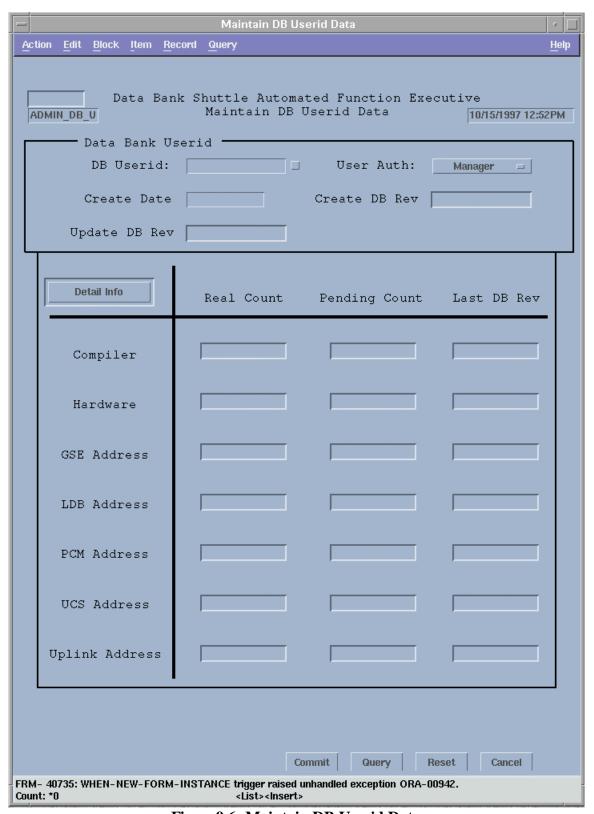


Figure 9-6 Maintain DB Userid Data

9.4.1.1 Legal Value Checks and Restrictions

The DB Userid field must be unique.

9.4.1.2 Queries

This form supports queries based on the DB Userid, User Auth, and Create Date fields. The detail block can only be queried via the <Detail Info> button.

9.4.1.3 Inserts

The DB Userid and User Auth fields are mandatory for creating a new record in the Data Bank Userid block. Inserts are not supported in the detail block.

9.4.1.4 **Updates**

Only the User Auth field can be modified. The DB Userid field cannot be modified on this form, but may be renamed using the Rename DB Userid form (refer to Section 9.14).

9.4.1.5 **Deletes**

A DB Userid and it's associated data can be deleted using this form. This function immediately deletes:

- The userid
- All FD data owned by that userid
- All operator privileges to use that userid
- Any entries in the DB Userid and format lists of 'unbuilt' TCIDs associated with that userid.

Upon committing, a popup screen displays allowing the operator to confirm or cancel the deletion. The confirmation screen has two buttons:

<u>Button</u>	<u>Effect</u>
<ok></ok>	Initiates the delete function and commits the changes.
<cancel></cancel>	Dismisses the delete function.

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TABLE 9-6 Maintain DB Userid Data Elements

Label	Action	Default	Remarks
DB Userid	A, Q, D, L	None	Must be unique.
User Auth	A, Q, M	Manager	Poplist: Manager, None
Create Date	Q	Current date and time	Auto-filled with current date and time.
Create DB Rev		None	Auto-filled with session db_rev.
Update DB Rev		None	Auto-filled with session db_rev.
Real Count		None	Display only.
Pending Count		None	Display only.
Last DB Rev		None	Display only.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.5 MAINTAIN ENGINEERING UNIT DATA – ENGINEERING UNIT

Maintain Engineering Unit Data form is used to maintain Engineering Units in the FD database (refer to Figure 9-7). An Engineering Unit must be created using this form before it can be specified in an FD's compiler record. Engineering Units are used to associate an engineering unit with an analog FD.

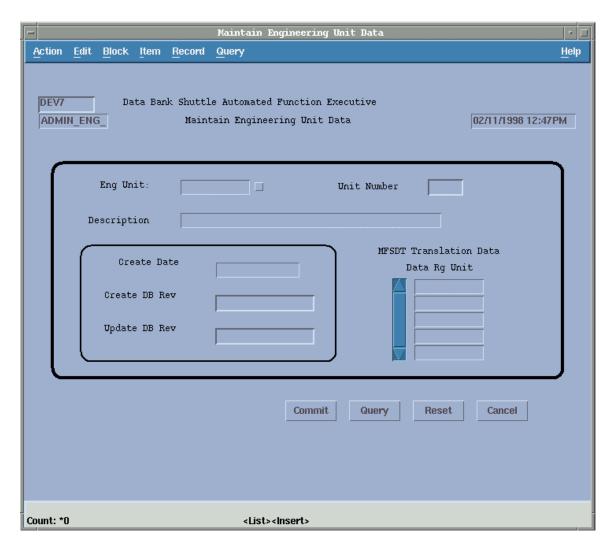


Figure 9-7 Maintain Engineering Unit Data

9.5.1 FUNCTIONAL DESCRIPTION

This form exhibits normal default Oracle® functionality. Creating or deleting an Engineering Unit increments the FD database revision number as described in Section 1.X.

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Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. An Engineering Unit deletion becomes effective when committed and affects the validation criteria for all future maintenance activity on FD compiler data.

9.5.1.1 Legal Value Checks and Restrictions

The Eng Unit, and Data Rg Unit fields must be unique within all existing Engineering Units.

9.5.1.2 Queries

The Eng Unit, Description, and Create Date fields can be queried.

9.5.1.3 Inserts

The Eng Unit field is mandatory for creating a new record.

9.5.1.4 **Updates**

The form supports updates on the Description and Data Rg Unit fields.

9.5.1.5 **Deletes**

The form supports deletion of any Engineering Unit. If the Engineering Unit that is being deleted is referenced by an existing FD compiler record, the deletion will fail.

When deleting an Engineering Unit, a confirmation box appears requesting that the operator confirm or cancel the deletion. The confirmation box has two buttons:

<u>Effect</u>
<OK> Initiates the delete function and commits the changes.
<Cancel> Dismisses the delete function.

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TABLE 9-7 Maintain Engineering Unit Data Elements

Label	Action	Default	Remarks
Eng Unit	Q, A, D, L	None	Must be unique.
Unit Number		None	Auto-filled with next sequential number.
Description	Q, A, M, D, E	None	No validation.
Data Rg Unit	A, M, D	None	Must be unique.
Create Date	Q	Current date and time	Auto-filled with current date and time.
Create DB Rev		None	Auto-filled with session db_rev.
Update DB Rev		None	Auto-filled with session db_rev.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.6 MAINTAIN ENUMERATED CLASS DATA – ENUMERATED CLASS

Maintain Enumerated Class Data form is used to maintain Enumerated Classes in the FD database (refer to Figure 9-8). An Enumerated Class must be created using this form before it can be specified in an FD's hardware record. Enumerated Classes are used to associate an enumerated class with a digital pattern FD.

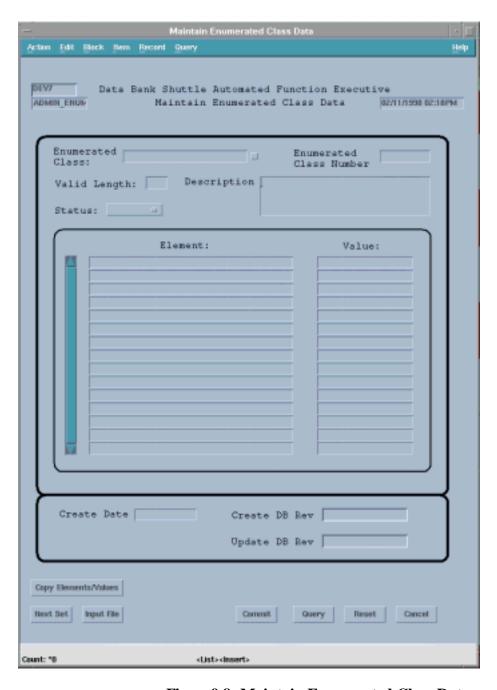


Figure 9-8 Maintain Enumerated Class Data

9.6.1 FUNCTIONAL DESCRIPTION

This form exhibits normal default Oracle® functionality. Creating or deleting an Enumerated Class increments the FD database revision number as described in Section 1.X.

Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. An Enumerated Class deletion becomes effective when committed and affects the validation criteria for all future maintenance activity on FD hardware data.

A popup screen appears when <Copy Elements/Values> is pressed. Refer to Section 9.6.1.6 for special processing associated with this button.

9.6.1.1 Legal Value Checks and Restrictions

The Enumerated Class field must be unique within all existing Enumerated Classes. The Element and Value fields must be unique within a specific Enumerated Class.

9.6.1.2 Queries

The Enumerated Class, Enumerated Class Number, Valid Length, Status, Description, and Create Date fields can be queried.

9.6.1.3 Inserts

The Enumerated Class field is mandatory for creating a new record.

9.6.1.4 **Updates**

The form supports updates on the Enumerated Class, Valid Length, Description, Status, Element, and Value fields.

9.6.1.5 Deletes

The form supports deletion of any Enumerated Class. If the Enumerated Class that is being deleted is referenced by an existing hardware record the deletion will result in the Enumerated Class's status being set to inactive.

When deleting an Enumerated Class, a confirmation box appears requesting that the operator confirm or cancel the deletion. The confirmation box has two buttons:

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<u>Button</u> <u>Effect</u>

<OK> Initiates the delete function and commits the changes.

<Cancel> Dismisses the delete function.

9.6.1.6 Special Processing

Effect

<Copy Elements/Values> Press to display the Copy Element List popup screen (refer to

Figure 9-9). This function appends the list of elements/values

from the specified Enumerated Class to the current

Enumerated Class. When the copy is complete, the popup screen closes and the elements/values are listed in the detail block of the main screen. <Commit> must be pressed to save

the copied data in the database.

The Copy Element List popup screen has two buttons:

Button Effect

<OK> Initiates the copy of the elements/values from the specified

Enumerated Class to the current Enumerated Class.

<Cancel> Dismisses the popup screen.



Figure 9-9 Copy Element List Popup Screen

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TABLE 9-8 Maintain Enumerated Class Data Elements

Label	Action	Default	Remarks
Enumerated Class	Q, A, M, D, L	None	Must be unique.
Enumerated	Q	None	Auto-filled with next sequential number.
Class Number			•
Valid Length	Q, A, M	None	No validation
Status	Q, A, M, L	None	Active/Inactive
Description	Q, A, M, D, E	None	No validation.
Element	A, M, D	None	Must be unique within the enumerated class.
Value	A, M, D	None	Must be unique within the enumerated class.
Create Date	Q	Current date and time	Auto-filled with current date and time.
Create DB Rev		None	Auto-filled with session db_rev.
Update DB Rev		None	Auto-filled with session db_rev.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

TABLE 9-9 Copy Element List Popup Elements

Label	Action	Default	Remarks
Enumerated	A, L	None	LOV validated.
Class to Copy			
Element List			
From			
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.7 MAINTAIN GSE/TMDB/UCS HIM CARD DEFINTIONS – HIM CARD TYPES

The Maintain GSE/TMDB/UCS HIM Card Definitions form is used to define the attributes of the cards that can be installed in HIMs (refer to Figure 9-10). The FD types supported by each channel/function code of a card must be defined in the FD database. Cards must be designated for use in Type I or Type II HIMs. Cards used in both types must be defined separately: one record to define the Type I configuration and another for the Type II configuration.

DBSAFE uses the data to support the definition of a HIM configuration via the Maintain GSE/TMDB/UCS HIM Definition form (refer to Section 4.12). That form allows identification of the type of card plugged into each HIM card slot. DBSAFE can then validate FD addressing by checking that the data type and channel/function code address of an FD assigned to a particular HIM/card address are actually supported by the card plugged into that location.

A Card Type ID (e.g., NONE) should be defined with no Channel/Function Code/FD Type information to indicate the empty card slots of a HIM.

9.7.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality.

There is a master-detail relationship between the Card Type ID and the HIM Card/FD Type Info block. There is also a master-detail relationship between the Card Type ID and the HIM Card Info block. This block can be queried only. It lists the HIM and Revs where a card is used.

A popup screen appears when <Copy Card Type Info> is pressed (refer to Figure 9-11). Refer to Section 9.7.1.6 for special processing associated with this button.

Creating, modifying, or deleting a card definition increments the FD database revision number as described in Section 1.X. Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. Changes become effective when committed and affect the validation criteria for all future maintenance activity on HIM configurations and FD addressing.

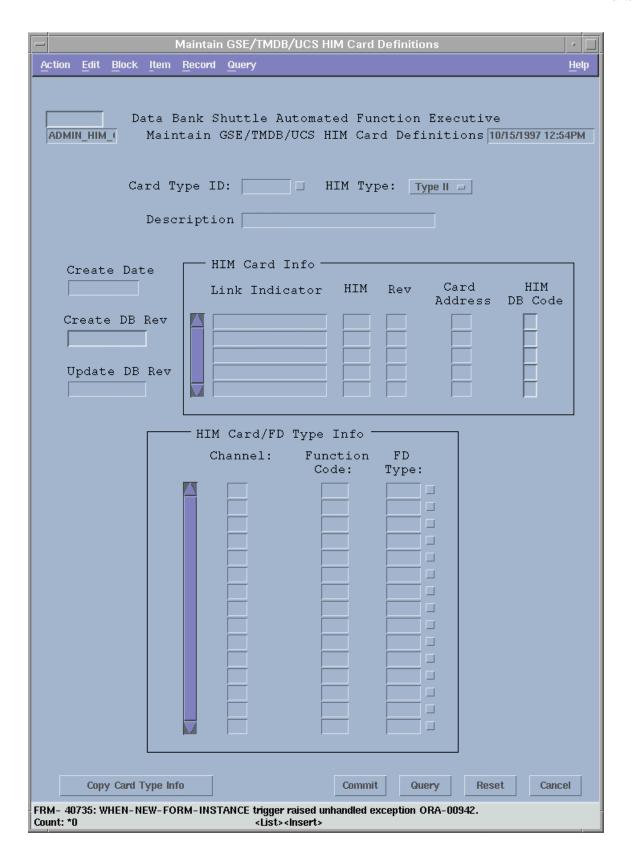


Figure 9-10 Maintain GSE/TMDB/UCS HIM Card Definitions

9.7.1.1 Legal Value Checks and Restrictions

The Card Type ID and HIM Type fields together must be unique. All three fields in the HIM Card/FD Type Info block must also be unique within the context of each Card Type ID. Channel must be an octal number between 0 and 17. Function code must be a number between 0 and 7. FD Type must be one of the data types supported by DBSAFE.

9.7.1.2 **Queries**

The master block can be queried on the following fields:

- Card Type ID
- HIM Type
- Description
- Create Date
- Update DB Rev

The form supports normal Oracle® query characteristics for master-detail relationships within the two detail blocks. The HIM, Rev, and Card Address fields of the HIM Card Info block and all fields of the HIM Card/FD Type Info block can be queried.

9.7.1.3 Inserts

The Card Type ID and HIM Type fields are mandatory for defining a new card in the master block. All fields are mandatory for creating new records in the HIM Card/FD Type Info block. Inserts are not supported in the HIM Card Info block.

9.7.1.4 **Updates**

Only the Description field of the master block can be updated. Any field in the HIM Card/FD Type Info block can be modified. Existing FD address data is not invalidated by modifying a card's Channel, Function Code, or FD Type; however all future additions or modifications of FD addressing are validated against the new card definition.

Updates are not supported in the HIM Card Info block.

9.7.1.5 **Deletes**

Any Card Type ID can be deleted using this form. Once deleted, a Card Type ID cannot be used to define a new HIM configuration. Existing HIM/Revs containing the deleted Card Type ID remain in the database, but can only be deleted or modified to use a valid Card Type ID.

Records in the HIM Card/FD Type Info block can also be deleted using this form. Deletes are not supported in the HIM Card Info block.

9.7.1.6 **Special Processing**

Button Effect
<Copy Card Type Info> Press to display the Copy Card Type Info popup screen. This

function appends the Channel/Function Code/FD Type data from a specified Card Type ID/HIM Type to the end of those currently listed on the main screen. When the copy is complete, the popup screen closes and the copied data displays in the detail block of the main screen. <Commit> must be pressed to save the copied information to the database.

The Copy Card Type Info popup screen has two buttons:

Button Effect

OK> Initiates the copy function for the specified Card Type ID and HIM Type.

Cancel> Dismisses the popup screen.

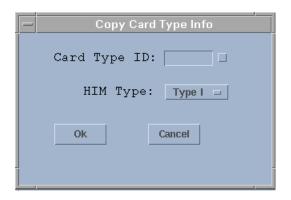


Figure 9-11 Copy Card Type Info

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TABLE 9-10 Maintain GSE/TMDB/UCS HIM Card Definitions Elements

Label	Action	Default	Remarks	
Card Type ID	A, Q, D, L	None	Must be unique.	
HIM Type	A, Q, D	Type II	Poplist: Type I, Type II	
Description	A, Q, M, D	None	No validation.	
Create Date	Q	Current date and time	Auto-filled with current date and time.	
Create DB Rev		None	Auto-filled with session db_rev.	
Update DB Rev	Q	None	Auto-filled with session db_rev.	
Link Indicator		None	Display only.	
HIM	Q	None		
Rev	Q	None		
Card Address	Q	None		
HIM DB Code		None	Display only.	
Channel	A, Q, M, D	None	Must be octal number, range 0-17.	
Function Code	A, Q, M, D	None	Must be numeric, range 0-7.	
FD Type	A, Q, M, D, L	None	LOV validated.	
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

TABLE 9-11 Copy Card Type Info Popup

Label	Action	Default	Remarks		
Card Type ID	A, L	None	LOV validated.		
HIM Type	A	Type II • Poplist: Type I, Type II.			
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)					

9.8 MAINTAIN HIM REF DES/DRAWING INFO – HIM DRAWING

The Maintain HIM Ref Des/Drawing Info form is used to maintain a Reference Designator (Ref Des) and up to two drawing numbers associated with a HIM (refer to Figure 9-12). The data is for user information only and is not required to support DBSAFE processing.

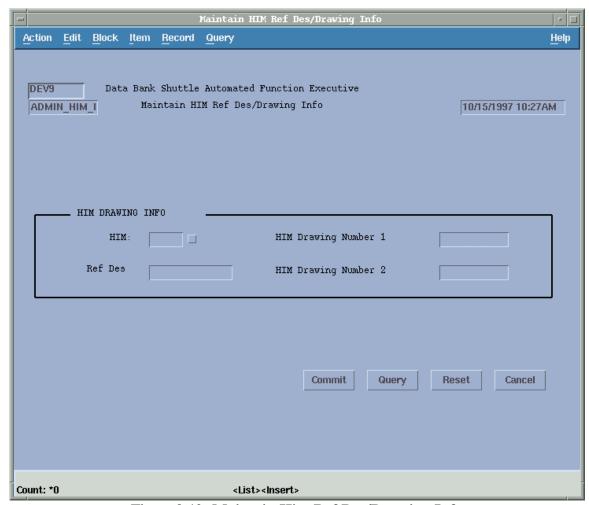


Figure 9-12 Maintain Him Ref Des/Drawing Info

9.8.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality.

9.8.1.1 Legal Value Checks and Restrictions

The HIM field must be a unique, octal number between 1 and 376.

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9.8.1.2 **Queries**

Any field on this form may be queried.

9.8.1.3 Inserts

The HIM field is mandatory for creating a new record.

9.8.1.4 **Updates**

The Ref Des, HIM Drawing Number 1, and HIM Drawing Number 2 fields can be modified. The HIM field cannot be modified.

9.8.1.5 **Deletes**

A HIM can be deleted only if it is not being used in the HIM_INFO table.

TABLE 9-12 Maintain HIM Ref Des/Drawing Info Elements

	Tilber > 12 Tilling Hell 2 Co, 2 Ta Tilling Elements			
Label	Action	Default	Remarks	
HIM	A, Q, D, L	None	• Must be octal number, range 1-376.	
Ref Des	A, Q, M, D	None	No validation.	
HIM Drawing	A, Q, M, D	None	No validation.	
Number 1				
HIM Drawing	A, Q, M, D	None	No validation.	
Number 2				
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.9 MAINTAIN LDB/UPLINK MDM CARD DEFINTIONS – MDM CARD TYPES

The Maintain LDB/UPLINK MDM Card Definitions form is used to define the attributes of the cards that can be installed in MDMs (refer to Figure 9-13). The FD types and channels supported by a card must be defined in the FD database.

DBSAFE uses the data to support the definition of an MDM configuration via the Maintain LDB/Uplink MDM Definition form (refer to Section 4.13). That form allows identification of the type of card plugged into each MDM card slot. DBSAFE can then validate FD addressing by checking that the data type and channel address of an FD assigned to a particular MDM/card address are actually supported by the card plugged into that location.

A Card Type ID (e.g., NONE) should be defined with no channel or FD type information to indicate the empty card slots of an MDM.

9.9.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality. There are three master-detail relationships on the form. The Card Type ID is the master for the three lower blocks. The MDM Card Info block can only be queried. It lists the MDM and revs where a card is used.

A popup screen appears when <Copy Card Type Info> is pressed. Refer to Section 0 for special processing associated with this button.

Creating, modifying, or deleting a card definition increments the FD database revision number as described in Section 1.X. Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. Changes become effective when committed and affect the validation criteria for all future maintenance activity on MDM configurations and FD addressing.

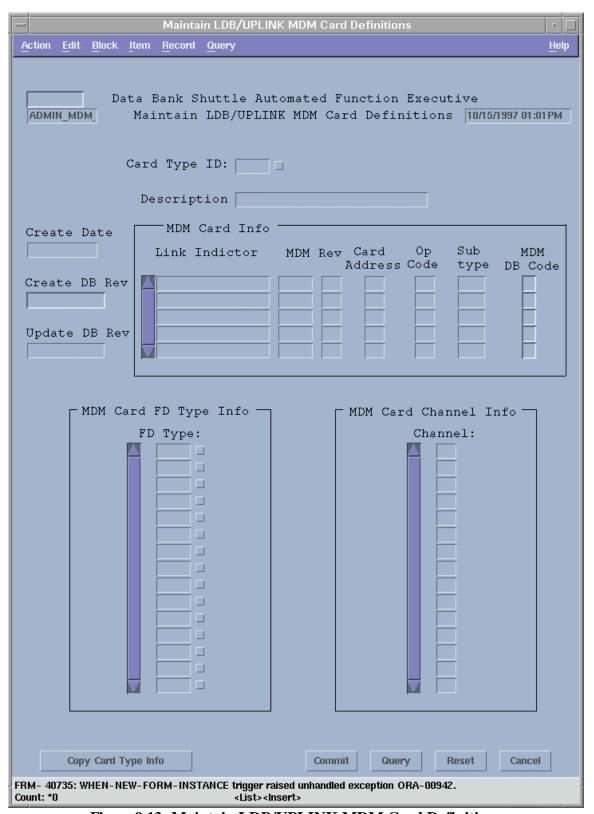


Figure 9-13 Maintain LDB/UPLINK MDM Card Definitions

9.9.1.1 Legal Value Checks and Restrictions

The Card Type ID field must be unique. The FD Type field and the Channel field must also be unique within the context of each Card Type ID. Channel must be numeric and the FD Type must be one of the data types supported by DBSAFE.

9.9.1.2 Queries

The master block can be queried on the following fields:

- Card Type ID
- Description
- Create Date
- Update DB Rev

Master-detail relationships within each of the three detail blocks can be queried. Queries are based on the MDM, Rev, Card Address, Op Code, and Subtype fields of the MDM Card Info block and all fields of the MDM Card FD Type Info and MDM Card Channel Info blocks.

9.9.1.3 Inserts

The Card Type ID field is mandatory for defining a new card in the master block. All fields are mandatory when creating new records in the MDM Card FD Type Info and MDM Card Channel Info blocks. Inserts are not supported in the MDM Card Info block.

9.9.1.4 **Updates**

The form supports updates only on the Description field.

9.9.1.5 **Deletes**

Any Card Type ID can be deleted. Once deleted, a Card Type ID cannot be used to define new MDM configurations. Existing MDM/Revs containing the deleted Card Type ID remain in the database, but can only be deleted or modified to use a Card Type ID that is valid in the database.

Records in the MDM Card FD Type Info and MDM Card Channel Info blocks can also be deleted.

Deletes are not supported in the MDM Card Info block.

9.9.1.6 Special Processing

Button Effect

<Copy Card Type Info>

Press to display the Copy Card Type Info popup screen. This function appends the Channel and FD Type data from a specified Card Type ID to the end of those currently listed on the main screen. When the copy is complete, the popup screen closes and the copied data displays in the two detail blocks of the main screen. <Commit> must be pressed to save the copied information to the database.

The Copy Card Type Info popup screen has two buttons:

Button Effect

<OK>

<Cancel>

Initiates the copy function for the specified Card ID. Dismisses the popup screen.

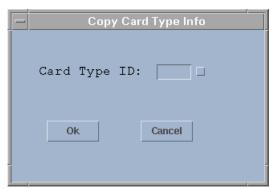


Figure 9-14 Copy Card Type Info

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TABLE 9-13 Maintain LDB/UPLINK MDM Card Definitions Elements

Label	Action	Default	Remarks
Card Type ID	A, Q, D, L	None	Must be unique.
Description	A, Q, M, D	None	No validation.
Create Date	Q	Current date and time	Auto-filled with current date and time.
Create DB Rev		None	Auto-filled with session db_rev.
Update DB Rev	Q	None	Auto-filled with session db_rev.
Link		None	Display only.
Indicator			
MDM	Q	None	
Rev	Q	None	
Card Address	Q	None	
Op Code	Q	None	
Subtype	Q	None	
MDM DB Code		None	Display only.
FD Type	A, Q, D, L	None	LOV validated.
Channel	A, Q, D		Must be numeric.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

TABLE 9-14 Copy Card Type Info Popup

Label	Action	Default	Remarks	
Card Type ID	A, L	None	LOV validated.	
*Ouery (O), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.10 MAINTAIN ODIS DATA - ODIS

The Maintain ODIS Data form is used to maintain Owner Discipline (ODIS) Names in the FD database (refer to Figure 9-15). An ODIS must be created using this form before it can be specified in an FD record. ODIS names are used in the FD database to identify the name of the group or organization that has signature authority over FD changes.



Figure 9-15 Maintain ODIS Data

9.10.1 FUNCTIONAL DESCRIPTION

This form exhibits normal default Oracle® functionality. Creating or deleting an ODIS increments the FD database revision number as described in Section 1.X.

Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. An ODIS deletion becomes effective when committed and affects the validation criteria for all future maintenance activity on FD compiler data.

9.10.1.1 Legal Value Checks and Restrictions

The ODIS Name field must be unique.

9.10.1.2 Queries

ODIS Name and Create Date fields can be queried.

9.10.1.3 Inserts

The ODIS Name field is mandatory for creating a new record.

9.10.1.4 Updates

Updates are not supported on this form. Rename an ODIS using the Rename ODIS form (refer to Section 9.15).

9.10.1.5 Deletes

An ODIS Name can be deleted using this form. Once deleted, an ODIS Name cannot be used to define new FD compiler records. Existing compiler records containing the deleted ODIS remain in the database, but can only be deleted or modified to use an ODIS Name that is valid in the database.

When deleting an ODIS name, a confirmation box displays requesting that the operator confirm or cancel the deletion. The confirmation box has two buttons:

Button	<u>Effect</u>
<ok></ok>	Initiates the delete function and commits the changes.
<cancel></cancel>	Dismisses the delete function.

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TABLE 9-15 Maintain ODIS Data Elements

Label	Action	Default	Remarks
ODIS Name	A, Q, D, L	None	Must be unique.
Create Date	Q	Current date and time	Auto-filled with current date and time.
Create DB Rev		None	Auto-filled with session db_rev.
Update DB Rev		None	Auto-filled with session db_rev.
Latest DB Rev		None	Display only.
Real CD Count		None	Display only.
Pend CD Count		None	Display only.
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.11 MAINTAIN RSYS DATA – RSYS

Maintain RSYS Data form is used to maintain Responsible System (RSYS) names in the FD database (refer to Figure 9-16). An RSYS must be created using this form before it can be specified in an FD's hardware record. RSYSs are used in the TCID Build software to qualify FDs for inclusion in a TCID and specify console assignments.

A System FD of type Console (CONS) is created when an RSYS is added to the FD database. The Nomenclature field on the form is the nomenclature of that System FD. When an RSYS is deleted, the System FD is also deleted.

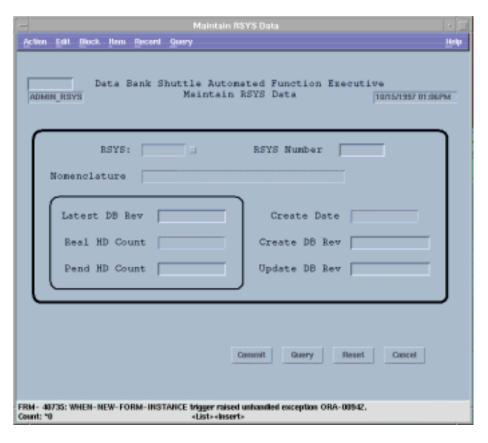


Figure 9-16 Maintain RSYS Data

9.11.1 FUNCTIONAL DESCRIPTION

This form exhibits normal default Oracle® functionality. Creating or deleting an RSYS increments the FD database revision number as described in Section 1.X.

Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. An RSYS deletion becomes effective when

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committed and affects the validation criteria for all future maintenance activity on FD hardware data.

9.11.1.1 Legal Value Checks and Restrictions

The RSYS field must be unique.

9.11.1.2 Queries

The RSYS, Nomenclature, and Create Date fields can be queried.

9.11.1.3 Inserts

The RSYS field is mandatory for creating a new record. When an RSYS is added, a System Function Designator (FD) is also created using the RSYS as the FD name and the Nomenclature specified on the form.

9.11.1.4 **Updates**

Updates are not supported on this form. Rename an RSYS using the Rename RSYS form (refer to Section 9.16).

9.11.1.5 Deletes

The form supports deletion of any RSYS. Once deleted, an RSYS cannot be used to define new FD hardware records. Existing hardware records containing the deleted RSYS remain in the database, but can only be deleted or modified to use an RSYS that is valid in the database. The System FD associated with the RSYS is also deleted.

When deleting an RSYS, a confirmation box appears requesting that the operator confirm or cancel the deletion. The confirmation box has two buttons:

ButtonOK>
Initiates the delete function and commits the changes.
Cancel>
Dismisses the delete function.

TABLE 9-16 Maintain RSYS Data Elements

Label	Action	Default	Remarks	
RSYS	A, Q, D, L	None	Must be unique.	
RSYS Number		None	Auto-filled with current date and time.	
Nomenclature	A, Q, D	None	No validation.	
Create Date	Q	Current date and time	Auto-filled with current date and time.	
Create DB Rev		None	Auto-filled with session db_rev.	
Update DB Rev		None	Auto-filled with session db_rev.	
Latest DB Rev		None	Display only.	
Real HD Count		None	Display only.	
Pend HD Count		None	Display only.	
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.12 MAINTAIN STATE CLASS DATA – STATE CLASS

Maintain State Class Data form is used to maintain State Classes in the FD database (refer to Figure 9-17). A State Class must be created using this form before it can be specified in an FD's compiler record. State Classes are used to associate a state class with a discrete FD and to identify the default states of the discrete in the FD database.



Figure 9-17 Maintain State Class Data

9.12.1 FUNCTIONAL DESCRIPTION

This form exhibits normal default Oracle® functionality. Creating or deleting a State Class increments the FD database revision number as described in Section 1.X.

Keep in mind that this form does not create pending changes or use the review and approval cycle for changing data in the FD database. A State Class deletion becomes effective when committed and affects the validation criteria for all future maintenance activity on FD compiler data.

9.12.1.1 Legal Value Checks and Restrictions

The State Class, and the 2 State fields must be unique within all existing State Classes. The Default State fields must be unique within a specific State Class.

9.12.1.2 Queries

The State Class, State Class Number, and Create Date fields can be queried.

9.12.1.3 Inserts

The State Class field, the 2 State fields, and the 2 Default State fields are mandatory for creating a new record.

9.12.1.4 Updates

The form supports updates only on the Default State fields.

9.12.1.5 Deletes

The form supports deletion of any State Class. If the State Class that is being deleted is referenced by an existing FD compiler record the deletion will fail.

When deleting a State Class, a confirmation box appears requesting that the operator confirm or cancel the deletion. The confirmation box has two buttons:

ButtonEffect<OK>Initiates the delete function and commits the changes.<Cancel>Dismisses the delete function.

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TABLE 9-17 Maintain State Class Data Elements

Label	Action	Default	Remarks	
State Class	A, Q, D, L	None	Must be unique.	
State Class Number		None	Auto-filled with next sequential number.	
State	A	None	Must be unique.	
Default State	A, M	None	Must be unique.	
Create Date	Q	Current date and time	Auto-filled with current date and time.	
Create DB Rev		None	Auto-filled with session db_rev.	
Update DB Rev		None	Auto-filled with session db_rev.	
*Ouery (O), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.13 MAINTAIN VCN GROUP DATA – VCN GROUP

The Maintain VCN Group Data form is used to maintain the TCID Build Group and Maintenance Mode for a VCN Name (refer to Figure 9-18). This data can be created using this form before adding FD hardware data for a new VCN, but it is not required. If the data doesn't exist, the Maintain Hardware Data form (refer to Section 4.5) displays a popup screen to collect the data when a new VCN Name is specified.

Build Groups collect related VCNs within Group/End Group directives in an FD Directory Build input file. The Group/End Group directives are used to overcome the restriction that no more than 400 VCNs may be specified in a FEP's VCN list. VCNs are grouped together for FEPs that share the same VCN list rather than specifying a single VCN list for the entire TCID. Therefore, the build group of a VCN depends upon the FEP in which an FD exists and the grouping names and methods used by the people who actually build TCIDs.

Maintenance Mode determines the method (Parts-Bin or Non-Parts-Bin) that will be used by DBSAFE when applying engineering changes to FD hardware data for that VCN Name. Keep in mind that the Maintenance Mode cannot be changed if there is any VCN Mod Rev that exists beyond a 0000 baseline revision. Refer to Section 1.X for a detailed description of these Maintenance Modes.

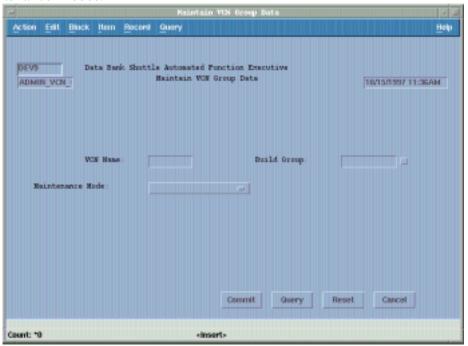


Figure 9-18 Maintain VCN Group Data

9.13.1 FUNCTIONAL DESCRIPTION

This form exhibits standard Oracle® Run*Form functionality.

9.13.1.1 Legal Value Checks and Restrictions

The VCN Name field must be unique. There is a legal value check on the Build Group.

9.13.1.2 Queries

Any field can be queried.

9.13.1.3 Inserts

All fields are mandatory when creating new records.

9.13.1.4 **Updates**

The Build Group and Maintenance Mode fields can be modified. Maintenance Mode cannot be changed if a VCN Mod Rev other than 0000 exists. The Rename VCN form may be used to rename a VCN (refer to Section 9.17).

9.13.1.5 Deletes

A VCN Name can be deleted using this form, but only if it does not exist in any other tables in DBSAFE.

TABLE 9-18 Maintain VCN Group Data Elements

	171DEE 7-10 Maintain VCIV Group Data Elements				
Label	Action	Default	Remarks		
VCN Name	A, Q, D	None	Must be unique.		
Build Group	A, Q, M, D, L	None	LOV validation	ated.	
Maintenance Mode	A, Q, M, D	None	• Poplist:	Parts-Bin, Non-Parts-Bin	
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)					

9.14 RENAME DATA BANK USERID – RENAME -> DB USERID

The Rename Data Bank Userid form is used to globally rename a DB Userid throughout the database (refer to Figure 9-19).

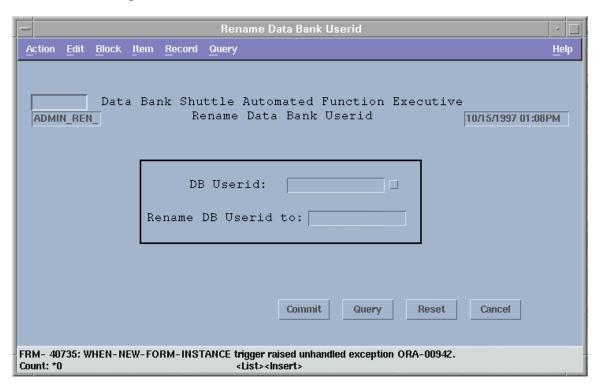


Figure 9-19 Rename Data Bank Userid

9.14.1 FUNCTIONAL DESCRIPTION

This is a custom form and should only be used as defined below. To rename a userid, query an existing userid, then specify the new name in the Rename Userid field.

9.14.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the DB Userid to be renamed actually exists in the database and that the first six characters of the new DB Userid are unique.

9.14.1.2 Queries

Standard Oracle® Run*Form queries are supported for the DB Userid field.

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9.14.1.3 Inserts

Inserts are not supported in this form.

9.14.1.4 Updates

Updates are not supported in this form.

9.14.1.5 **Deletes**

Deletes are not supported in this form.

9.14.1.6 Special Processing

When <Commit> is pressed, all occurrences of the value queried in the DB Userid field change to the value specified in the Rename DB Userid to field. Keep in mind this affects all FD data and hardware/address baselines.

TABLE 9-19 Rename Data Bank Userid Elements

Label	Action	Default	Remarks
DB Userid	Q, L	None	LOV for query only.
Rename DB		None	First six characters must be unique.
Userid to			-
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.15 RENAME ODIS – RENAME -> ODIS

The Rename ODIS form is used to globally rename an ODIS throughout the database (refer to Figure 9-20).



Figure 9-20 Rename

ODIS

9.15.1 FUNCTIONAL DESCRIPTION

9.15.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the ODIS to be renamed actually exists in the database and that the new ODIS name is unique.

9.15.1.2 Queries

Standard Oracle® Run*Form queries are supported for the ODIS field.

9.15.1.3 Inserts

Inserts are not supported in this form.

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9.15.1.4 Updates

Updates are not supported in this form.

9.15.1.5 Deletes

Deletes are not supported in this form.

9.15.1.6 Special Processing

When <Commit> is pressed, all occurrences of the value queried in the ODIS field change to the value specified in the Rename ODIS to field. Keep in mind this affects FD data.

TABLE 9-20 Rename ODIS Elements

Label	Action	Default	Remarks	
ODIS	Q, L	None	LOV for query only.	
Rename ODIS to None • Must be unique.				
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.16 RENAME RSYS - RENAME -> RSYS

The Rename RSYS form is used to globally rename an RSYS throughout the database (refer to Figure 9-21).

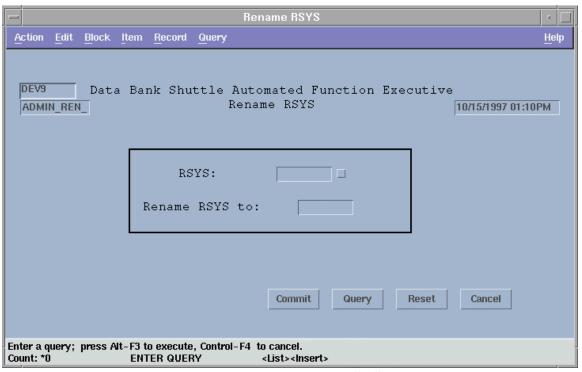


Figure 9-21 Rename RSYS

9.16.1 FUNCTIONAL DESCRIPTION

This is a custom form and should be used only as defined below. To rename, query an existing RSYS, then specify the new name in the Rename RSYS to field.

9.16.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the RSYS to be renamed actually exists in the database and that the new RSYS name is unique.

9.16.1.2 Queries

Standard Oracle® Run*Form queries are supported for the RSYS field.

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9.16.1.3 Inserts

Inserts are not supported in this form.

9.16.1.4 Updates

Updates are not supported in this form.

9.16.1.5 **Deletes**

Deletes are not supported in this form.

9.16.1.6 Special Processing

When <Commit> is pressed, all occurrences of the value queried in the RSYS field change to the value specified in the Rename RSYS to field. Keep in mind this affects FD data.

TABLE 9-21 Rename RSYS Elements

Label	Action	Default	Remarks	
RSYS	Q, L	None	LOV for query only.	
Rename RSYS to None • Must be unique.				
*Query (Q), Add (A), Modify (M), Delete (D), List (L), Edit (E)				

9.17 RENAME VCN NAME - RENAME -> VCN NAME

The Rename VCN Name form is used to globally rename a VCN throughout the database (refer to Figure 9-22).

9.17.1 FUNCTIONAL DESCRIPTION

This is a custom form and should be used only as defined below. To rename, query an existing VCN, then specify the new name in the Rename VCN to field.

9.17.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the VCN to be renamed actually exists in the database and that the new name is unique.

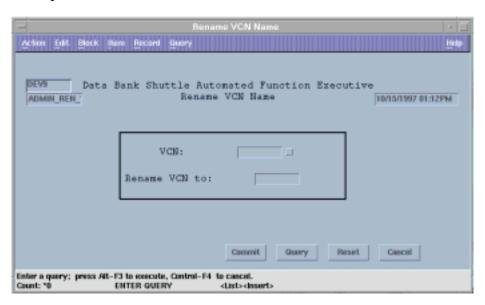


Figure 9-22 Rename VCN Name

9.17.1.2 Queries

Standard Oracle® Run*Form queries are supported for the VCN field.

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9.17.1.3 Inserts

Inserts are not supported in this form.

9.17.1.4 Updates

Updates are not supported in this form.

9.17.1.5 **Deletes**

Deletes are not supported in this form.

9.17.1.6 Special Processing

When <Commit> is pressed, all occurrences of the value queried in the VCN field change to the value specified in the Rename VCN to field. Keep in mind this affects FD data and hardware baselines.

TABLE 9-22 Rename VCN Elements

Label	Action	Default	Remarks
VCN	Q, L	None	LOV for query only.
Rename VCN to		None	Must be unique.
*Ouery (O), Add (A), Modify (M), Delete (D), List (L), Edit (E)			

9.18 RENAME WORK GROUP - RENAME -> WORK GROUP

The Rename Work Group form is used to globally rename a Work Group throughout the database (refer to Figure 9-23). A Work Group can be given a new name or it can be merged into another Work Group by changing the name to one that already exists.

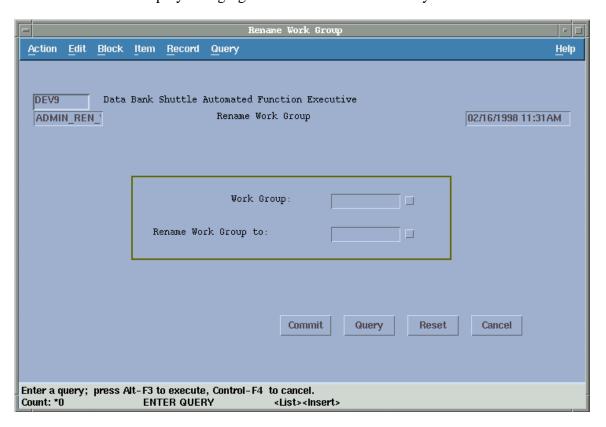


Figure 9-23 Rename Work Group

9.18.1 FUNCTIONAL DESCRIPTION

This is a custom form and should be used only as defined below. To rename, query an existing work group, then specify the new name in the Rename Work Group to field.

9.18.1.1 Legal Value Checks and Restrictions

Legal value checks ensure the Work Group to be renamed actually exists in the database.

9.18.1.2 Queries

Standard Oracle® Run*Form queries are supported for the Work Group field.

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9.18.1.3 Inserts

Inserts are not supported in this form.

9.18.1.4 Updates

Updates are not supported in this form.

9.18.1.5 **Deletes**

Deletes are not supported in this form.

9.18.1.6 Special Processing

When <Commit> is pressed, all occurrences of the value queried in the Work Group field change to the value specified in the Rename Work Group to field.

TABLE 9-23 Rename Work Group Elements

Label	Action	Default	Remarks		
Work Group	Q, L	None	LOV for query only.		
Rename Work	L	None	No validation.		
Group to					
*Query (Q), Add	(A), Modify	(M), Delete (D),	List (L), Edit (E)		